Does Power Make Us Mean? An Investigation of Empowerment and Revenge Behaviors in The Cyberspace

Zongchao Li
University of Miami, z.li13@umiami.edu

Follow this and additional works at: https://scholarlyrepository.miami.edu/oa_dissertations

Recommended Citation

This Open access is brought to you for free and open access by the Electronic Theses and Dissertations at Scholarly Repository. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of Scholarly Repository. For more information, please contact repository.library@miami.edu.
UNIVERSITY OF MIAMI

DOES POWER MAKE US MEAN? AN INVESTIGATION OF EMPOWERMENT AND REVENGE BEHAVIORS IN THE CYBERSPACE

By

Zongchao Li

A DISSERTATION

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Coral Gables, Florida

May 2015
This dissertation investigated consumer response mechanism in a service failure context. A social-media-based Service Failure Response Model was introduced that incorporated emotive antecedents, behavioral outcomes, a mediation process, and moderating factors. The model integrated the framework of psychological empowerment, and explored how social media usage empowered users and whether this power transferred into unique behavioral patterns. It was argued that perception of power increased an action orientation in the power holder, which transferred into a revenge behavior when users complained about the failure on social media to publicly shame the company.

The study proposed 16 hypotheses and two research questions which were answered through two studies: an online survey where participants recalled their own experience of a recent service failure encounter (Study 1); an online experiment where various empowerment levels were manipulated and participants were given a hypothetical scenario to respond (Study 2).

Results confirmed the Service Failure Response Model. Anger, dissatisfaction and perceived betrayal were emotive/cognitive antecedents that lead to consumers’ exit, voice, and revenge responses. This process was mediated by desire for avoidance and desire for
revenge. Meanwhile, intrapersonal empowerment was found to have a significant
moderating effect on the anger-behavior connection. Further investigation through the
experiment showed that participants with lower interactional empowerment levels were
less likely to complain publicly online, a response defined as revenge behavior in this
study.
DEDICATION

This dissertation is dedicated to my loving family. To my parents, Li Weiqing and Jia Yuzhen, thank you for your unconditioned love, encouragement and support. You taught me to believe in myself and gave me strength to carry on. To my husband, Liu Yulei, your love and encouragement led me to pursue a dream that I had never dared to embrace. You helped me to set my sights higher and broader than I ever could have imagined. My family’s love and support give meanings to my life. They have made all the efforts worthwhile. I am grateful and blessed.
# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................ vii

LIST OF TABLES ........................................................................................................... viii

CHAPTER

1 INTRODUCTION .................................................................................................. 1

2 LITERATURE REVIEW ....................................................................................... 5

   INTRAPERSONAL AND INTERACTIONAL EMPOWERMENT ............................... 5

   PASSIVE AND ACTIVE SOCIAL MEDIA USE .................................................... 9

   SOCIAL MEDIA EMPOWERMENT ...................................................................... 11

   EXIT, VOICE, AND REVENGE ........................................................................ 14

      Exit and voice as responses to organization decline .................................... 15

      Revenge .......................................................................................................... 16

      Exit, voice, and revenge on the internet ......................................................... 19

   EMOTIONS AND MEDIATION .......................................................................... 21

      Anger and dissatisfaction .............................................................................. 21

      Desire for revenge and desire for avoidance ................................................. 23

   POWER AND REVENGE ................................................................................ 26

3 METHOD ............................................................................................................. 30

   STUDY 1 .......................................................................................................... 30

      MEASURES ................................................................................................... 30

      DATA COLLECTION AND PARTICIPANTS ............................................... 33

      Data collection .............................................................................................. 33

      Inclusion and exclusion criteria .................................................................... 34
LIST OF FIGURES

Figure 2.1 Service Failure Response Model ................................................................. 21
Figure 2.2 Hypothesized relationships between variables ........................................... 29
Figure 4.1 Nested model with passive use constrained ............................................... 49
Figure 4.2 Nested model with active use constrained .................................................. 49
Figure 4.3 Nested model with passive use and active use freely estimate .................... 50
Figure 4.4 Direct effects model .................................................................................. 56
Figure 4.5 Indirect effects model ................................................................................ 58
Figure 4.6 Perceived betrayal model .......................................................................... 60
Figure 4.7 Moderation model of interactional empowerment ..................................... 62
Figure 4.8 Moderation model of intrapersonal empowerment .................................... 62
LIST OF TABLES

Table 4.1 ............................................................................................................................................. 47
Table 4.2 ............................................................................................................................................. 53
Table 4.3 Main Effects of Interactional Empowerment................................................................. 67
Table 4.4 Summary of Hypothesis Testing Results............................................................... 68
Chapter One

Introduction

*The fundamental concept in social science is Power, in the same sense that Energy is the fundamental concept in physics... The laws of social dynamics are laws which can only be stated in terms of power.*

— Russell, 1938, p. 10

In September 2011, Bank of America (BOA) proposed to charge a $5 monthly fee for its debit card users who did not have a mortgage and/or $20,000 in their savings accounts. Resentments arose among Bank of America’s customers. Among them was Molly Katchpole. Katchpole was then a 22-year-old college graduate working two part-time jobs. Her anger led her to launch a petition on Change.org to repeal the $5 fee. The response was overwhelming. In less than a month, more than 300,000 people from all 50 states joined the petition. More than 21,000 people pledged to close their Bank of America checking accounts. Negative comments started pouring in Bank of America’s Facebook and Twitter accounts. The online pretest was also gaining national media attention. As complaints mounted from bank customers and news media, Bank of America announced it would drop its new banking fee less than one month after it announced the proposal. The story did not stop there. Katchpole’s campaign had inspired many others to start their own petitions on Change.org to challenge their own banks to drop proposed fees. Within weeks, other major financial institutions such as Citi, Wells Fargo, and JPMorgan Chase announced dropping their debit fee plans due to public pressure.

BOA’s debit card fee crisis well illustrates arising consumer power in online social networks. Social media technologies have empowered the silent majority and
accelerated the effectiveness of consumer activism (McAdam, 2011). In response, many companies, such as Hertz, begin to formally accept consumer complaints through social media. This transition reflects a move by corporations to actively manage their brands in the online conversations enabled by social media. This activity is particularly targeted at consumers who are seen to be driving a shift in marketplace power structures. Social media are quietly, but rapidly, changing the ecosystem of influence in the virtual sphere (Hanna, Rohm, & Crittenden, 2011).

The influence of this power phenomenon can be found in all aspects of contemporary life. It extends from interpersonal relations to business-consumer context, from political revolutions to social issues. Social media have enabled users to exert their power to virally affect organizational decisions. Consumers are now highly aware of their influence over others online and the collective power that they may exert over companies (Li & Stacks, 2014). Through the social networking sites such as Facebook, Twitter, and Instagram, the networked population is gaining greater access to information, communicating more freely, and building stronger rapport through various online groups. The connectivity established through social media can enhance users’ abilities to take collective actions and demand social change (Shirky, 2011). This empowered action could spread to a large population with rapid speed, thus making a considerable impact. The most active users groups, who are often the opinion leaders on the virtual sphere, can influence organizational decision-making in a rather dramatic manner, such as crisis situations. Rather than being a fad, social media could be the biggest shift since the industrial revolution (Qualman, 2010). It is changing our societal structures and social relations.
This dissertation investigates psychological empowerment on social media in the business context. It explores how social media usage empowers users and whether this power transfers into unique behavioral patterns. In particular, its investigation focuses on a negative context in which consumers have unsatisfactory experiences with a company. It is argued that perception of power increases an action orientation in the power holder, which transfers into a revenge behavior when users complain about the failure on social media to publicly shame the company.

Investigation of public empowerment has been a popular topic in community psychology and marketing research. In public relations research, social media empowerment has received nothing more than passing mentions. Involving direct public engagement, empowerment falls under the realm of the public relations discipline, but has received little empirical attention other than in an organization’s internal communication setting, such as employee empowerment (Chiles & Zorn, 1995; Men, 2011; Men & Stacks, 2013), and empowering the public relations function as organization’s dominant coalition (Berger, 2005; Grunig, 2006; Holtzhausen & Voto, 2002). In the external context, the role of the public relations endeavor in the big picture of power dynamics certainly deserves attention. It is a much-needed investigation in the field and profession to better understand the underlying psychological mechanism of the rising power of external audiences. This dissertation contributes to the profession’s body of knowledge by introducing a framework of social media empowerment and how it is associated with online activism.

The central argument is the role of social media in the power-action process. It is argued that the social and political revolutions are not caused by social media. They are
caused by people’s anger, frustration, and those strong emotions that have been behind every human revolution. However, social media empower this change, catalyze the behavior tendency and amplify the outcome. To support this proposition, two research studies were developed, which addressed the following three questions:

- Do social media empower people?
- What drives people to take actions against unsatisfactory experiences (emotive antecedents)? What are the behavioral outcomes of unsatisfactory experiences (behavioral consequences)?
- And, are the revenge behaviors triggered by social media empowerment? In other words, does power make us mean?

The first two sets of questions are tested through survey methodology. The third question is tested through online experimental methodology. The literature and theoretical framework for both studies are discussed in Chapter 2.
Chapter Two

Literature Review

This chapter lays out the key theoretical frameworks underlining the dissertation. It summaries recent empirical investigations and findings, based on which 16 hypotheses and two research questions are proposed. The chapter is organized as follows. First, the concept of psychological empowerment is introduced. Then active and passive social media uses are discussed, and a connection between the two frameworks are drawn. Next, the exit-voice-revenge framework is introduced as behavioral responses to service failures. This section is followed by a discussion of the emotive antecedents and the mediating variables, and a Service Failure Response Model is proposed. The chapter is concluded by discussing the connection between power and revenge.

Intrapersonal and Interactional Empowerment

Empowerment is a multi-level, open-ended construct that includes the individual level (Leung, 2009; Mo & Coulson, 2010; Schneider, Von Krogh, & Jäger, 2013), organizational level (Berger, 2005; Holtzhausen & Voto, 2002; Peterson & Zimmerman, 2004), and community level (Hur, 2006; Zimmerman, 2005; Zimmerman & Rapport, 1988; Zimmerman & Zahniser, 1991). Empowerment can be viewed as a process (Mo & Coulson, 2010) or an outcome (Hur, 2006; Perkins & Zimmerman, 1995; Zimmerman, 1995). It can refer to the act of empowering (Thorlakson & Murray, 1996) or the internal mental process of the individual being empowered (Menon, 1999). Menon (1999) defined psychological empowerment from the employee perspective as a cognitive state characterized by a sense of perceived control, perceptions of competence, and goal internalization. Studies of empowerment can be found in a variety of disciplines,
including political science, social welfare, education, health, management, and community psychology (see Hur, 2006 for a summary).

This study adopts the *psychological empowerment construct* from community psychology research. Psychological empowerment refers to the expression of the empowerment construct at the individual level. It is described as “the connection between a sense of personal competence, a desire for, and a willingness to take action in the public domain” (Zimmerman & Rappaport, 1988, p. 725). There are three underlining assumptions for psychological empowerment (Zimmerman, 1995). First, empowerment takes different forms for different people. Individual characteristics such as age, gender, and socioeconomic status affect how empowerment is perceived and acted upon. Second, empowerment takes different forms in different contexts. This indicates that empowerment varies based on context. For example, in an authoritarian organizational context such as corporations and political systems, collective action may be a more salient trait for empowered individuals, while in a participatory organization, such as many online communities, perceived competence or desire for control would be more relevant. Third, psychological empowerment is not a static trait; rather, it fluctuates over time. This suggests that individuals may become more empowered over time and that some people may be more empowered than others.

The empowerment theory (Zimmerman, Israel, Schulz, & Checkoway, 1992; Zimmerman, 1995, 2000) holds that psychological empowerment includes intrapersonal, interactional, and behavioral components. The *intrapersonal empowerment* component refers to how individuals think about themselves and their capability to influence others as well as their social and political systems (Menon, 1999; Zimmerman & Rappaport,
1988). Literature from various disciplines uses different terminologies in describing the intrapersonal aspects of psychological empowerment (Petrovčič & Petrič, 2014), but all strongly relies on the conceptual model proposed by Zimmerman (1995), which suggests that intrapersonal empowerment includes the three sub dimensions of control, self-efficacy and perceived competence (Zimmerman, 1995; Zimmerman & Zahniser, 1991; Leung, 2009). Further, control refers to beliefs about one’s ability to exert influence in various contexts; self-efficacy refers to self-assessment of one’s abilities to carry out certain tasks; and perceived competence refers to perceptions one’s capability to perform a job or task well (Hur, 2006; Petrovčič & Petrič, 2014; Zimmerman, 1995; Zimmerman & Rapport, 1988).

The interactional empowerment component refers to one’s intellectual understanding of the social environment around them and the knowledge and resources required to produce change (Zimmerman, 1995). In other words, it addresses the belief or awareness of the options available to achieve goals and an understanding of the norms and values of a particular context. This cognitive understanding and learning about the social environment leads to the development of decision-making and problem-solving skills necessary to actively engage one’s environment (Zimmerman, 2005; Zimmerman et al., 1992). Finally, the behavioral component of psychological empowerment refers to the empowered actions that may exert influence on outcomes (Zimmerman, 2005). This is achieved through participation in activities and community organizations such as political groups, self-help groups, religious groups, or service organizations, or helping others to cope with problems (Zimmerman et al., 1992).
Early theoretical investigations of empowerment have focused largely on the intrapersonal aspect. However, scholars have raised the importance of investigating the interactional aspect of the empowerment construct. Speer’s (2000) study, for instance, offers insights and empirical evidence that individual’s personal sense of control and efficacy (intrapersonal empowerment) differs from one’s intellectual understanding of power and social change (interactional empowerment). This is in response to a critique by Riger (1993) that traditional empowerment theory may overly emphasize on the individual mastery and control rather than the cooperation or community elements. In other words, “can an emphasis on individual mastery or a sense of empowerment ever produce the social change outcomes that empowerment purports to produce, given the macro-level forces which contribute to social and psychological distress?” (Speer, 2000, p.59) Thus, “measuring only a sense of empowerment elevates individualism, thus undermining the collective efforts required to create change in social systems” (Speer, 2000, pp.52).

Zimmerman (1995) cautioned that all three components (intrapersonal, interactional and behavioral) must be measured to fully capture psychological empowerment construct. The measure should also be adjusted for study population and context. Speer’s (2000) investigation addressed this concern by creating and testing a measurement scale of interactional empowerment, which incorporated the collective aspect of empowerment by two dimensions — collective action and interpersonal relationships. Specifically, collective actions refer to one’s understanding of the collective mechanism needed and the group power to create change. Interpersonal
relationships addresses one’s understanding of the intimate interpersonal relationships needed to develop social power (Speer, 2000).

It is important to note that a psychologically empowered individual may possess either or both of the intrapersonal and interactional components. This study focuses on psychological empowerment as a process, and the behavioral component is not the focal interest of this research. Instead, both dimensions of intrapersonal and interactional empowerment will be investigated. This study is interested in whether Internet users’ social media activities affect intrapersonal and interactional empowerment in the cyber space, as discussed in the following sections.

**Passive and Active Social Media Use**

Social media are Internet-based applications and technologies that “enable participation, connectivity, user-generated content, sharing of information, and collaboration among a community of users” (Henderson & Bowley, 2010, p. 239). Different types of social media include social networking sites (SNS) such as Facebook, video sharing sites such as YouTube, blogs, podcasts, wikis, and the online virtual world. Social media have created vast connections in the virtual world among the global community with a collaborative and participatory culture (Henderson & Bowley, 2010). They encourage users to “discuss, debate, and collaborate with one another as millions more watch, listen and learn” (McConnell & Huba, 2006, p. x).

Researchers have argued that social media have fundamentally changed the marketing ecosystem of influence (Constantinides, Romero & Boria, 2009; Hanna, Rohm, & Crittenden, 2011). Instead of passive information recipients in the marketing process, consumers today are taking an increasingly active role in co-creating content online,
especially when highly engaged. Existing studies of online consumer behavior have suggested several user typologies classified by specific goals and behaviors (Li & Bernoff, 2008; Mathwich, 2002; Muntinga, Moorman, & Smit, 2011; Shao, 2009). For example, Mathwich (2002) suggested four Internet user types from the relationship orientation perspective: lurkers, personal connectors, socializers, and transactional community members, with lurkers being the most inactive groups. Similarly, Li and Bernoff (2008) classified consumers’ online behavior within the social media context as six user groups: inactives, spectators, joiners, collectors, critics, and creators.

As another example, Shao (2009) and Muntinga et al. (2011) suggested a continuum of consumers’ online involvement: consuming, contributing, and creating, representing an increase in levels of engagement. *Consuming* represents a minimum engagement: consumers participate without actively contributing or creating content on the social media sites. *Contributing* is a middle level of engagement, which includes “both user-to-content and user-to-user interactions” (Muntinga et al., 2011, p. 17). Examples of contributing behaviors include engaging in conversations on the social media sites, such as commenting on Facebook posts or replying to other users’ comments. *Creating*, the highest level of user engagement, involves actively producing and publishing content that others consume can contribute to.

Although the specific classifications of consumers’ online activity differ among scholars, one thing upon which researchers seem to agree is that there are different levels of *involvement* among social media users. Some users are more active in content creation while others are more inactive and inclined to simply consume content. Pagani and Mirabello (2011) combined Li and Bernoff’s (2008) user typology with a usage typology
and suggested two usage types: *passive use* and *active use* of social media. Passive social media users are the spectators, a concept similar to the consuming level of user engagement as identified by Muntinga et al. (2011). The active social media users are the creators, critics, collectors, and joiners, the definitions of which can be found overlapping as the contributing and creating levels of user engagement. The existing literature, however, offers no consensus on how to classify user engagement online (Shao, 2009). In addition, many of these typologies are qualitatively based and a valid and reliable measure has yet to be developed (e.g., Li & Bernoff, 2008; Muntinga et al., 2011; Shao, 2009). Thus, this study adopts the broader framework of active and passive social media as suggested by Pagani and Mirabello (2011). The active/passive use framework covers the essence of differentiating various levels of user engagement and offers a validated measurement scale as well.

**Social Media Empowerment**

The distinction between active and passive social media use is closely associated with psychological empowerment enabled by the new media platform. Researchers have examined how new technologies have empowered individual users (Constantinides & Fountain, 2008; Füller, Mühlbacher, Matzler & Jawecki, 2009; Hanna et al., 2011; Heinonen, 2011; Kucuk & Krishnamurthy, 2007). User-generated content on social media enables individuals to make their own voices heard and grant consumers more control and power over the market process. The influence of such consumer empowerment for organizational communication management is far-reaching, not only in the form of information sourcing but also in the communication process, where individuals can engage in direct dialogues with companies to express frustration and
confront wrongdoings (Constantinides & Fountain, 2008). Consequently, active users become the opinion leaders on the Internet who may influence organizational decision-making.

Empowerment has been identified as a key motive for consumer online engagement (Wang & Fesenmaier, 2003; Muntinga et al., 2011). Consumers were found to be highly aware of their influence over others online and the collective power that they may exert over companies through virtual brand communities (Constantinides et al., 2009). Thus, they are using social media to exert their influence and power over other people or companies (Muntinga et al., 2011). A good example of social media empowerment is citizen journalism, in which case exposure of product failures or organizational misconduct could reach a large audience online in a short time to make a considerable impact (Leung, 2009). Consumer empowerment has also been found to influence on product design and new product creation through virtual co-creation online (Hoyer, Chandy, Dorotic, Krafft & Singh, 2010; Füller et al., 2009). Moreover, empowerment permitted by social media has also been examined within frameworks of health communication and healthcare management (e.g., Lober & Flowers, 2011; Rogers, Chamberlin, Ellison, & Crean, 1997).

Past research has suggested links between citizen participation and psychological empowerment (Zimmerman & Rappaport, 1988), which found that individuals highly engaged in community and organizational participation also indicated higher levels of psychological empowerment than the less engaged individuals. In addition, a great deal of research studying online health-related support groups have found different levels of empowerment between lurkers, the inactive online user groups, and the posters, which
are the most active groups (Barak, Boniel-Nissim, & Suler, 2008; Mo & Coulson, 2010; Petrovčič & Petrič, 2014; Schneider et al., 2013; van Uden-Kraan, Drossaert, Taal, Seydel, & van de Laar, 2008). There is empirical evidence of differences in terms of psychological empowerment between active and passive online users (Barak et al., 2008; Mo & Coulson, 2010; van Uden-Kraan et al., 2008). Leung (2009), for example, found a positive association between user-generated content and intrapersonal empowerment, especially for self-efficacy and perceived competence. Researchers argue that active participation increases sense of self-efficacy and self-esteem, which leads to greater personal empowerment (Barak et al., 2008). Lurkers’ empowerment strength is much lower than that of groups that actively engaged in content posting (Mo & Coulson, 2010).

On the other hand, Petrovčič and Petrič (2014) examined the difference of intrapersonal and interactional empowerment between lurkers and posters. They found posters indicated significantly higher interactional empowerment than lurkers, but no difference was observed for intrapersonal empowerment. Posting frequency was found to be positively associated with interactional empowerment (Petrovčič & Petrič, 2014). Petrovčič and Petrič’s (2014) findings pose an interesting contrast with other research where a positive association was found between active online media use and intrapersonal empowerment (e.g., Baraket al., 2008; Leung, 2009; Mo & Coulson, 2010; van Uden-Kraan et al., 2008). Theoretically, it could be argued that intrapersonal empowerment is an individual personality measure that should not be easily influenced by media usage. In other words, for an individual with low desire for control, low self-efficacy, and low perceived competence, it is unlikely that active social media use would alter these individual traits. Given the theoretical consideration, as well as conflict
empirical findings in past research about media use the intrapersonal empowerment, the following research question is posed:

**RQ1:** Are active social media use and passive social media use related to intrapersonal empowerment?

In addition, limited attention has been given to the interactional aspect of psychological empowerment and its association with social media use. As argued by Speer (2000) and Zimmerman (1995), interactional empowerment is an essential aspect of psychological empowerment and it should be empirically measured to fully capture the empowerment construct. This is especially applicable to the social media context because of the collective power enabled by social networks. It is expected that familiarity and usage of the new media platforms would enhance an intellectual understanding of resources online and the actions needed to produce change, which define the interactional empowerment. Based on the reasoning above, the following hypotheses are proposed:

**H1:** Active social media use is positively related to interactional empowerment.

**H2:** Passive social media use is positively related to interactional empowerment.

**H3:** The relationship between active social media use and interactional empowerment is stronger than the relationship between passive social media use and interactional empowerment.

**Exit, Voice, and Revenge**

Four variables—patronage reduction (exit), negative word-of-mouth (voice), online public complaining (revenge), and vindictive complaining (revenge) are behavioral outcomes tested in this study. These four constructs are extracted from the
framework of responses to organization failure and decline. The major theoretical
developments are discussed below.

*Exit and voice as responses to organization decline*

In 1970, Hirschman published “*Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States.*” The book has since then been cited more than 16,000 times across various disciplines according to Google Scholar index. Deriving from his observations of the railway system in Nigeria, Hirschman (1970) proposed dissatisfied members of an organization may either exit (stop consumption or affiliation), voice (complaining to management), or remain loyal (continue consumption or membership). This has since become the basic model of dissatisfaction responses. The E-V-L model applies to organizations large and small, across various industries, from corporations to non-profits, incorporating business-to- consumers and business-to-business, and even nations. In the consumer context, there are two possible activist responses, exit and voice, as discussed below.

1. Unsatisfied consumers may *exit*, meaning cutting off their relationship and withdraw interactions from the organization. People may stop buying the company’s product or withdraw their memberships, thus leaving the market. As a result, sales decline, memberships decrease and revenues drop. Management is compelled to identify misconduct and correct wrongdoings to prevent further exit.

2. Unsatisfied consumers may also *voice* by expressing their dissatisfaction directly to the management, or complaining via other public or private channels. The voice behavior is usually associated
with an attempt to repair or improve the relationship through communication, complaint, or proposal for change.

Both exit and voice signal dissatisfaction for organization performance. They can also be considered as means to strike the power balance between individuals and the organization. Exit is associated with the *Invisible Hands* (Smith, 1776) in economics. The metaphor was used by Smith to describe how individuals’ self-interest generated actions can bring unintended social benefits in the trade and market exchange. In the free market, individuals are free to enter or exit the market, constantly forming and ceasing relationships. Voice, on the other hand, has been studied largely as a feedback mechanism by political scientists (e.g., Lijphart, 1997). While both exit and voice measure decline in an organization, voice is more informative in that it provides valuable information about reasons for the decline. Exit, by itself, only provides a warning signal.

In marketing research, the exit and voice framework has been applied to study the consumer complaint behavior (Singh 1988, 1989; Singh & Wilkes, 1996) and consumer-brand relationships (Aaker, 1996). Mattila and Ro (2008), for example, classified three behavioral responses when consumers encountered service failures: direct face-to-face complaining, negative word-of-mouth, and switching. Switching can be considered as an exit strategy, and it implies avoidance tendency by disengaging pre-established relationships (Mattila & Ro, 2008).

**Revenge**

While Hirschman’s (1970) seminal Exit-Voice-Loyalty (E-V-L) model has been widely employed in social science research, some scholars (e.g., Hunt, 1991; Huefner & Hunt, 2000; Rusbult, Farrell, Rogers, & Mainous, 1988; Rusbult, Zembrodt & Gunn,
1982) found it too general and not inclusive of all behavior patterns. There is a “dark” side of the consumer reaction to dissatisfaction untouched: revenge.

Revenge, or retaliation, is an aggressive behavior done with the intention of getting even (Hunt, 1991; Huefner & Hunt, 2000; Huefner et al., 2002). The revenge behavior is intended to harm and punish, with no analog in Hirschman’s model. To address this issue, Huefner and Hunt (2000) proposed to expand the E-V-L model to include retaliation. Research has found that revenge is a natural human behavior when people lack better means of restoring equality (DeMore, Fisher, & Baron, 1988). An example given by Huefner and Hunt (2000) about revenge behavior is the following story given by an angry customer:

In a grocery store, I asked a man who delivers bread a question about his product. When he brushed me off, I decided to get back at him. I waited until no one is around, then I grabbed his bread from the shelf and twisted it so that no one would want to buy it. After a short sign of satisfaction, I took off. (p. 61)

Huefner and Hunt (2000) classified six retaliation types: create cost/loss, vandalism, trashing, stealing, negative word-of-mouth, and personal attack. They further verified that exit, voice and revenge are essentially independent consumer behaviors (Huefner & Hunt, 2000; Huefner et al., 2002).

Grégoire and Fisher (2008) argued that revenge is punitive in nature. They suggested three forms of revenge behaviors in the consumer context: vindictive complaining, spreading negative word-of-mouth (offline), and third-party complaining for publicity. Vindictive complaining refers to when a consumer verbally abuses the company or its employees to cause inconvenience or be unpleasant with them (Grégoire
& Fisher, 2008; Hibbard, Kumar, & Stern, 2001). This is a direct form of revenge behavior. Spreading negative word-of-mouth in an offline context to family and friends is considered by Grégoire and Fisher (2008) as an indirect form of retaliation. By doing so, consumers may hope to tarnish a company’s reputation. Finally, consumers may complain to a third-party, such as news organizations or the Internet, aiming to making the company’s actions public (Grégoire, Laufer, & Tripp, 2010). Other retaliatory behaviors such as those identified by Huefner and Hunt (2000) were not considered because they are illegal and uncommonly used.

This study adopts a similar behavior response categorization as Grégoire and Fisher (2008) but with some alterations. Four consumer responses were analyzed in this study: 1) exit as defined by patronage reduction, 2) voice as defined by spreading negative word-of-mouth offline to family and friends, 3) offline revenge as represented by vindictive complaining, and 4) online revenge as typified by publicly complaining online for negative publicity. This study considers offline word-of-mouth as a voice, rather than revenge, behavior for two reasons. First, when consumers spread negative word-of-mouth (NWOM) offline, their intentions are always be to punish or cause harm. They may be doing so simply to vent anger and frustration, or to warn others from suffering similar situations. If such is the case, then spreading NWOM is not punitive in nature. Second, voice, by definition, is not solely a communication behavior directly oriented to the management. It also includes situations when people express their dissatisfaction via public or private channels. Spreading NWOM would fit in this criterion. As for online public complaining, it is operationalized in this study as a public complaining behavior aimed for negative publicity to a mass audience online. It is
distinguished from offline word-of-mouth behavior and deemed as a revenge behavior. The rationale for this proposition is discussed in the next section.

*Exit, voice, and revenge on the Internet*

Most of the prior benchmarking research and theory on consumer dissatisfaction was investigated based on the offline setting. With the advent of online social networks, people have broader and more flexible choices of communication. Released from the restraints of social status and physical appearance, a computer mediated communication environment helps people to better express themselves (Derksetal, 2008; McKenna & Bargh, 1999). The anonymity feature of many forums and websites allows people to better reveal themselves than in face-to-face communication (Mathwick, 2002; Postmes et al., 2001; Reingold, 1993). As a result, the online communication environment draws people together to open up, offer help, and form meaningful and close relationships (Joinson, 2001; Mathwick, 2002). With this being said, might social media and online communication reconstruct consumer’ exit, voice, and revenge behaviors choices? Could there be new forms of revenge behaviors?

Research to answer these questions is quite limited. Kucuk (2008) argues that the Internet has fostered exit-based and voice-based consumer power. The Internet makes exit easier because consumers have more buying choices. With the many online shopping sites available, consumers can easily abandon one market and switch to another (Kucuk, 2008). Factors that used to restrict exit behaviors, such as location, efficiency, and buying choices, are no longer constraints on the Internet. The Internet also fosters collective action in exit. Many consumer-organized brand boycott websites, such as www.dumpstarbucks.com, are examples of collective exit behaviors. On the other
hand, voice has also been facilitated by the Internet, especially in social media. By establishing presence on social networking sites, such as Facebook and Twitter, companies are able to communicate with consumers directly (Li & Stacks, 2014). This direct communication has greatly enhanced consumer voice. In addition, social media also make it easier for consumers to communicate with each other, disseminate information and generate negative word-of-mouth (Kucuk, 2008).

As discussed, both exit and voice are strengthened on the Internet, and such changes are a reflection of the aggrandized consumer power. Yet, the boundary between exit and voice seems to be blurred. Many anti-brand websites not only voice dissatisfaction, but also call for boycott. Furthermore, many brand protest sites amplify the seriousness of the issue, or frame the grievance in a way that it becomes a concern for other present and potential consumers (Ward & Ostrom, 2006). The negative word-of-mouth, in this case, becomes a revenge behavior because it publicizes the resentment to a mass audience, rather than to the close social ties as seen in offline word-of-mouth communication. By complaining publicly online, dissatisfied consumers often present the companies’ failures as violations of norms or betrayals of consumer rights worthy of public outrage. Many of them structure negative comments to persuade others to avoid or oppose the firm (Laczniak, DeCarlo, & Ramaswami, 2001). Thus, online public complaining can be labeled as a revenge behavior to demonstrate power. This is an important claim because the construct of public complaining on social media, although heavily discussed, has rarely been conceptualized and measured in the literature (Grégoire et al., 2010).
Emotions and Mediation

A function of this study is to explore the process of the power-revenge connection. Previous literature in related areas has suggested that emotive variables such as anger and dissatisfaction are the causes behind revenge behaviors, and that there may be mediating factors such as desire for revenge and desire for avoidance. Figure 2.1 presents a proposed Service Failure Response Model with anger and dissatisfaction being the emotive antecedents, leading to behavior outcomes of exit, voice, and revenge. Further, this process is mediated by desire for revenge and desire for avoidance. The rationale for the proposed model is discussed below.

Figure 2.1 Service Failure Response Model

Anger and dissatisfaction

Negative emotions have been widely studied to explain consumer responses to service failures (Bougie et al., 2003; Grégoire et al., 2010; Mattila & Ro, 2008; Zeelenberg & Pieters, 2004). Besides differing in valence and intensity, emotion also
takes different forms, such as anger, dissatisfaction, regret, or disappointment (Zeelenberg & Pieters, 2004). Different emotions are believed to lead to varying behavioral responses (Bougie et al., 2003; Mattila & Ro, 2008; Sánchez-García & Currás-Pérez, 2011; Zeelenberg & Pieters, 1999; 2004). This study examines the influence of anger and dissatisfaction and how they may be related to the four different behavioral responses.

Among all the negative emotions being studied in the service failure context, anger has been a very popular construct. Anger is a strong emotion that often involves blame and the belief that injustice exits (Bougie et al., 2003). Anger is generally related to behavior tendencies such as “feel like behaving aggressively” and “letting go” (Bougie et al., 2003, p. 379). Anger was found to be a strong predictor of revenge behaviors (Grégoire et al., 2010; Mattila & Ro, 2008; Sánchez-García, & Currás-Pérez, 2011; Zourrig, Chebat, & Toffolic, 2009). Consumers that express emotions of anger are likely to engage in responses such as direct complaining (Grégoire et al., 2010; Mattila & Ro, 2008; Sánchez-García, & Currás-Pérez, 2011), negative word-of-mouth (Grégoire et al., 2010; Mattila & Ro, 2008; Sánchez-García & Currás-Pérez, 2011) and exit (Mattila & Ro, 2008; Sánchez-García & Currás-Pérez, 2011).

Compared to anger, relatively less attention has been given to study the effects of dissatisfaction. Fornell and Wernerfelt (1987, p.338) define dissatisfaction as “a state of cognitive/affective discomfort caused by an insufficient return relative to the resources spent by the consumer at any stage of the purchase/consumption process.” Dissatisfaction is considered to be a “relatively undifferentiated emotion” in a sense that it is a general, nonspecific emotional reaction to a negative event (Bougie et al., 2003, p. 379). Past
research indicated that in situations of service failure, dissatisfaction can lead consumers to exit (Keaveney & Parthasarathy, 2001; Sánchez-García & Currás-Pérez, 2011), complain (Sánchez-García & Currás-Pérez, 2011; Zeelenberg & Pieters, 1999; 2004), to spread negative word-of-mouth (Sánchez-García & Currás-Pérez, 2011), or to engage in third party complaining (Bougie et al., 2003).

Based on discussion above, the following hypothesis is proposed.

H4: Anger has significant direct effects on a) patronage reduction (exit), b) negative word-of-mouth (voice), c) online public complaining (revenge), and d) vindictive complaining (revenge) behaviors.

H5: Dissatisfaction has significant direct effects on a) patronage reduction (exit), b) negative word-of-mouth (voice), c) online public complaining (revenge), and d) vindictive complaining (revenge) behaviors.

Desire for revenge and desire for avoidance

Two constructs, desire for revenge and desire for avoidance, can serve as mediating variables. Both desires represent the existence of a consumer grudge or lack of forgiveness (Grégoire, Tripp, & Legoux, 2009). The two constructs are related because they both reflect an inability to “let go” (Finkel, Rusbult, Kumashiro, & Hannon, 2002). Specifically, desire for revenge is defined as “customers’ need to punish and cause harm to firms for the damage they have caused” (Grégoire et al., 2009, p. 19). Desire for avoidance is defined as “customers’ need to withdraw themselves from any interactions with firms” (Grégoire et al., 2009, p. 19). Grégoire et al. (2010) noted it is important to distinguish the desire to behave from actual behavior because, depending on the context, people are not always able to transfer their desire into actions (Grégoire et al., 2010). In
other words, having a desire to revenge or avoid does not guarantee the person will seek revenge or avoidance, in the same way that purchase intention does not always translate into buying behaviors. It should be noted that desire for revenge and desire for avoidance are not mutually exclusive. One can maintain both desires.

Past research show that perceived unfairness can trigger desire for revenge (Aquino, Tripp, & Bies, 2006; Jones, 2009). When rules or social norms are violated, it is often perceived as unfair, thus triggering revenge behaviors (Aquino et al., 2006). Moreover, desire for revenge can also be evoked when people feel betrayed by a trusted source. Desire for revenge is arguably the origin of most retaliatory behaviors, such as negative word-of-mouth, online public complaining, and private complaining (Grégoire et al., 2009). Given these considerations, the following hypothesis is deduced:

**H6:** Desire for revenge is positively related to: a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors.

While desire for revenge is essentially a “fighting” strategy, desire for avoidance is more passive in nature (Grégoire et al., 2009). People with higher avoidance tendencies are less likely to take confrontation strategies such as revenge and punishment. Rather, they opt for withdrawing from the relationship with the offender and estrangement behaviors (McCullough, Worthington, & Rachal, 1997). Formally, the following hypothesis is proposed:

**H7:** Desire for avoidance is positively related to: a) patronage reduction (exit), and b) negative word-of-mouth (voice).
In additional, desire for revenge is found to mediate the relationships between unfairness and retaliatory behaviors (Jones, 2009; Skarlicki & Folger, 1997). We can expect a desire to behave as a middle step that leads emotions to behaviors. Thus, desire for revenge and desire for avoidance are tested as mediation variables by estimating the indirect effects from anger and satisfaction to behavioral outcomes. Based on this line of thought, the following hypotheses are proposed.

**H8:** There is a significant indirect effect of *anger* on a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors through desire for revenge.

**H9:** There is a significant indirect effect of *dissatisfaction* on a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors through desire for revenge.

**H10:** There is a significant indirect effect of *anger* on a) patronage reduction (exit) and b) negative word-of-mouth (voice) through desire for avoidance.

**H11:** There is a significant indirect effect of *dissatisfaction* on a) patronage reduction (exit) and b) negative word-of-mouth (voice) through desire for avoidance.

Such behaviors can be explained by the cognition of perceived betrayal: when consumers feel their relationship norms are violated by the company, they are likely to feel betrayed (Fitness, 2001; Ward & Ostrom, 2006). Betrayal has been found to be a key motivational factor that leads to actions of restoring fairness and justice (Grégoire & Fisher, 2008). The consumers thus want to punish the company for the betrayal by warning others online. Compared to anger and dissatisfaction, betrayal is extremely
difficult to forgive and forget, thus it is particularly influential in predicting revenge (Finkel et al., 2002; Grégoire & Fisher, 2008).

**H12:** Perceived betrayal is positively related to: a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors.

**H13:** There is a significant indirect effect of perceived betrayal on a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors through desire for revenge.

Social media facilitate exit-based and voice-based power with its unique features of collectivity, connectivity, low cost, and greater control. Many new media sites also provide platforms for online public complaining. Past research found power has a direct association with revenge behaviors (Aquino et al., 2006; Grégoire et al., 2010). In particular, Grégoire et al. (2010) found that individuals of lower power status are reluctant to engage in direct revenge for a fear of counter-retaliation. Highly powered individuals, on the other hand, are less fearful of counter-retaliation, thus are more inclined to engage in direct revenge. Thus, the following hypothesis is proposed:

**H14:** There is a moderating effect of psychological empowerment on a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors. Highly empowered individuals are more likely to engage in voice and revenge behaviors.

**Power and Revenge**

The third major research inquiry of this dissertation explores the causal relationship between power and revenge. As discussed earlier, past research has
suggested some association between power and revenge. But the legitimate question is: “Is there a causal relationship involved?” In other words, does power make people mean? To help answer this question, this section provides further theoretical discussions that lead to two additional hypotheses and one research question. An experiment is then designed to verify this proposition.

Research on power has found that people’s behavior changes as a psychological consequence of being in power. The classical, albeit ethically controversial, Stanford prison experiment demonstrated that people’s behaviors may change dramatically when placed in a position of power (Zimbardo, 2007). When the student participants acted as guards (a position of power) their behaviors turned violent and abusive. They started punishing the participants acting as prisoners when directions and demands were not followed.

More recent scientific findings suggest that a default brain mechanism may cause people to lose empathy when possessing power (Obhi, Swiderski, & Brubacher, 2012). The argument is that power is related to the feelings of personal control. Obhi et al. (2012) found a significant difference in intentional binding between low-power priming and high-power priming, suggesting that power reduces the sense of agency for action outcomes. This means people in low power situations are more likely to seek relatively more supportive or collaborative relationships. Psychological research by Galinsky and collaborators found that research participants primed for high power had an increased action orientation. High power participants are more likely to engage in risky behavior (e.g. unprotected sex), initiate aggressive negotiation techniques, and get up to stop an
annoying fan (Anderson & Galinsky, 2006; Galinsky, Gruenfeld, & Magee, 2003; Magee, Galinsky, & Gruenfeld, 2007).

Marketing researchers have argued that a consumer’s empowerment is a psychological state that motivates behavior. Madrigal and Boush (2008), for example, found that consumers were willing to reward corporations as a way to empower themselves and affect movement toward their personal goals. Sweetin et al. (2013) extended the framework to study willingness-to-punish corporations and found that empowered consumers were willing to punish the corporate brand for socially irresponsible actions.

Based on the above reasoning, it follows that there is a direct link between psychological empowerment and revenge/punishment behaviors. Individuals of higher power status should be more likely to engage in punishment behaviors when a service failure occurs. This effect should be salient for both intrapersonal and interactional empowerment. However, no theoretical foundations have been provided in the literature as to how intrapersonal empowerment and interactional empowerment may interact with each other. Therefore, the following hypotheses and research question are proposed:

**H15:** Individuals primed for intrapersonal empowerment are more likely to punish a brand for poor behavior.

**H16:** Individuals primed for interactional empowerment are more likely to punish a brand for poor behavior.

**RQ2:** Are there any interaction effect between intrapersonal empowerment and interactional empowerment?

**Summary**
Based on the preceding discussion the relationship between empowerment and punishment the following model is presented that accounts for the 16 hypotheses and 2 (3) research questions were posed in Figure 2.2:

Figure 2.2 Hypothesized relationships between variables

Chapter Three addresses the research methodologies employed to test the model and answer the research questions.
Chapter Three

Method

To test the hypothesized Service Failure Response Model, two studies were designed that allowed for inspection of different segments of the model. The first study was a survey in which participants were asked to think about a past experience involving a service failure encounter. In the first study, the empowerment constructs were measured. The survey design allowed for examining relationships between the affect, mediation and behavioral variables based on participants’ true experience. It provided evidence to test Hypothesis 1-14 and Research Question 1. To further explore the causal relationship between power and revenge, an online experiment was designed as the second study. The empowerment constructs were manipulated in the second study, and participants were asked to respond to a hypothetical scenario. The student study helped test for Hypotheses 15-16 and Research Question 2. The two studies are each introduced in the following sections.

Study 1

Measures

The online survey included measures of social media use (active use and passive use), intrapersonal and interactional empowerment measures, the emotive variables (anger, dissatisfaction), mediating variables (desire for revenge, desire for avoidance), as well as behavioral responses variables (patronage reduction, negative word-of-mouth, online public complaining, vindictive complaining). All study measures were adopted from previous research and adapted to fit in the current study context. Reliability estimates reported are from the current study.
Measures of active and passive media use were adapted from scales developed by Pagani and Mirabello (2012). Specifically, active use ($\alpha = .90$) was measured by four items, such as “I comment on other’s post on social media sites.” Passive use ($\alpha = .81$) was measured by three items, such as “I read online discussions on social media site.” Both measures were based on a seven-point scale from “never” to “constantly/all the time.”

The intrapersonal empowerment measure was adapted from Leung (2009) and contained three sub-dimensions: self-efficacy measured by 5 items ($\alpha = .89$), perceived competence measured by 4 items ($\alpha = .78$), and desire for control measured by 5 items ($\alpha = .65$). For interactional empowerment, the measure developed by Speer (2000) was adapted. Two dimensions of collective action, measured by 3 items ($\alpha = .78$), and interpersonal relationship, measured by 3 items ($\alpha = .75$), were tested. All empowerment measures were based on seven-point scale with 1 being strongly disagree and 7 being strongly agree.

Anger ($\alpha = .86$) and dissatisfaction ($\alpha = .83$) were each measured by three items (Grégoire & Fisher, 2008). Desire for revenge was measured by five items ($\alpha = .95$) (Grégoire & Fisher, 2006; Grégoire et al., 2009), and desire for avoidance ($\alpha = .93$) was measured by four items (Grégoire et al., 2009). In additional, perceived betrayal ($\alpha = .84$) was measured by four items such as “I felt cheated”, and “I felt betrayed by the company” (Grégoire et al., 2009).

There were four dependent measures: 1) Patronage reduction (exit) ($\alpha = .90$), measured by four items such as “I stopped doing business with this company;” 2) Negative word-of-mouth (voice) ($\alpha = .90$), measured by three items such as “I denigrated
this company to my friends;” 3) vindictive complaining (revenge offline) ($\alpha = .90$), measured by three items such as “I complained to the company or its employee to give them a hard time;” and 4) online public complaining for negative publicity (revenge online) ($\alpha = .63$), measured by three items such as “I complained about my experience online to make public the behaviors and practice of the company.” The measures were adopted from Grégoire and Fisher’s (2006, 2008) previous studies.

Control measures included failure severity (latent measured by three items, $\alpha = .89$), relationship length, as well as demographic variables such as age, gender, ethnicity, income and education. The survey questionnaire was designed through Qualtrics. A detailed description of all scale items can be found in Appendix A.

Pretest

To test the study instruments, a pretest was conducted through an online survey with 117 students from a university in the southeastern United States. The result of the pretest indicated, in general, good reliability of all the measures. However, the active use and passive use scales were found to be positively skewed. Thus, the response categories were adjusted in Study 1 with greater differentiation on the positive end of the scale to obtain a normal distribution. In addition, for the interactional empowerment measures (i.e., interpersonal relationships and collective action scales), wordings were adjusted in the main study to better reflect the study context. The final adjusted survey items can be found in Table 3.1.
Table 3.1 Demographics and descriptive statistics for Study 1

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong> ((M=32, SD=11.29))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>57.7%</td>
<td>214</td>
</tr>
<tr>
<td>Female</td>
<td>42.3%</td>
<td>157</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>8.4%</td>
<td>31</td>
</tr>
<tr>
<td>Black/(non-Hispanic)</td>
<td>4.0%</td>
<td>15</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>5.4%</td>
<td>20</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>79.8%</td>
<td>296</td>
</tr>
<tr>
<td>Other</td>
<td>1.6%</td>
<td>6</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0.8%</td>
<td>3</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>0.3%</td>
<td>1</td>
</tr>
<tr>
<td>High school/ GED</td>
<td>11.6%</td>
<td>43</td>
</tr>
<tr>
<td>Some college</td>
<td>29.6%</td>
<td>110</td>
</tr>
<tr>
<td>Associates degree</td>
<td>8.9%</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>40.4%</td>
<td>150</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>6.7%</td>
<td>25</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>0.8%</td>
<td>3</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1.6%</td>
<td>6</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,000 or under</td>
<td>28.3%</td>
<td>105</td>
</tr>
<tr>
<td>$20,001 to $40,000</td>
<td>28.6%</td>
<td>106</td>
</tr>
<tr>
<td>$40,001 to $60,000</td>
<td>18.1%</td>
<td>67</td>
</tr>
<tr>
<td>$60,001 to $80,000</td>
<td>11.3%</td>
<td>42</td>
</tr>
<tr>
<td>$80,001 to $100,000</td>
<td>4.3%</td>
<td>16</td>
</tr>
<tr>
<td>$100,000 and higher</td>
<td>4.9%</td>
<td>18</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>4.6%</td>
<td>17</td>
</tr>
</tbody>
</table>

**Data collection and participants**

*Data collection*

For Study 1, an online survey was designed using Qualtrics and the survey link was distributed through the Amazon Mechanical Turk website. A total of 564 responses were collected. The Amazon Mechanical Turk (MTurk) is an online labor market run by
Amazon.com where requesters can post human intelligence tasks (HITs) for a small amount of monetary incentives. Individuals can register themselves as “workers” with valid identity and e-mail address to receive payment for the HITs they completed. A requester can either approve or reject the HITs completed by the workers based on the quality of the work. The MTurk site started as a crowdsourcing platform. It is now widely used for behavioral research and survey studies (Goodman, Cryder, & Cheema, 2013; Mason & Suri, 2012).

One may wonder about the representativeness of the MTurk participants and the quality of the data because the payment is relatively low ($1.38 hourly rate on average, Mason & Suri, 2012) compared to other online panels. Abundant research has demonstrated that MTurk is actually an ideal platform to obtain inexpensive, high quality panel data for academic research (Buhrmester, Kwang, & Gosling, 2011; Crump, McDonnell, & Gureckis, 2013; Gosling, Vazire, Srivastava, & John, 2004). The demographic data gathered through MTurk generally resemble patterns of data from other Internet-based research, but with a higher internal consistency and slightly greater diversity (Buhrmester et al., 2011; Mason & Suri, 2012). Moreover, the fluctuations in compensation rates were found not to affect data quality (Buhrmester et al., 2011; Goodman et al., 2012).

*Inclusion and exclusion criteria*

For sample inclusion criteria, this project adopted the commonly suggested qualification that required 90% of the tasks done by a worker had been approved by requesters (Mason & Suri, 2012). Other qualification criterion such as “MTurk Masters” is not applicable for research purposes (Bates & Lanza, 2013). The workers’ location was
restricted to the United States. To ensure data quality, two attention-check questions were included in different sections of the survey where the participants were explicitly asked to select a particular response (e.g., agree) as their answers (see Appendix A). Those who missed either or both of the attention check questions were excluded from the final sample. In addition, Amazon provides a spreadsheet with IDs of all the workers who completed the task. The worker IDs and respondents’ IP addresses were carefully monitored to ensure no duplicate responses were recorded. After filtering through all the above-mentioned exclusion criteria, a final sample of 371 effective responses were retained, generating an effective response rate of 65.78%.

**Participants**

The final sample consisted of 57.7% male and 42.3% female. As shown in Table 3.1, the respondents’ average age was 32 (SD = 11.29). The majority of the respondents indicated themselves as being non-Hispanic White (79.8%), with a bachelor’s degree (40.4%), and having an annual income of below $40,000 (56.9%).

**Procedure**

At the beginning of the study, participants were asked to recall a recent experience with a company or a service provider in which they felt dissatisfied and inadequately treated. Then they were asked to describe the situation in an open-ended question. This question also served as a quality control measure to make sure all responses fit in the study setting of service failures. Next, independent emotive measures, mediator variables, control measures and behavioral response questions were asked in the study. Finally, demographic measures of age, gender, ethnicity, education, and income were included.
Study 2

The Study 2 examined individuals’ willingness to publicly punish a brand with which they have a positive pre-existing relationship through an online experiment. In a 3 (intrapersonal empowerment: high intra/ low intra/ intra control) x 3 (interactional empowerment: high inter/ low inter/ inter control) experiment, participants were given the opportunity to publicly punish a restaurant that had performed below expectations. Punishment behavior is operationalized as a public complaint via the organizational social media account (e.g., Twitter or Facebook page), which has the added impact of affecting the broader public perception of the company and its brand.

Manipulation and stimuli

Priming technique was used to manipulate the study controls. Priming is an implicit memory effect in which exposure to one stimulus influences a response to another stimulus (Bargh & Chartrand, 1999). Priming is often used in experimental manipulation in that it provides an unobtrusive control over participants’ perceptions, impression, motivations or moods (Bargh & Chartrand, 2000). For many years priming research focused on effects in perception and impression formation. Recent priming literature demonstrates that prime manipulations can produce behavioral and motivational effects as well (Bargh & Gollwitzer, 1994).

Intrapersonal empowerment manipulation

For manipulation of the intrapersonal empowerment, the procedure developed by Galinsky et al. (2003) was adopted in which the participants were asked to complete a short essay reflecting on an empowering or disempowering experience. Participants in
the control condition were asked to write an essay on a neutral prompt verified through pre-testing.

Specifically, participants assigned to the high-power condition were instructed as follows:

Please recall a particular incident in which you had control or authority over another individual or individuals. This may be a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to lead or evaluate those individuals. Please describe this situation in detail—what happened, how you felt, etc.

Those participants assigned to the low-power condition were instructed as follows:

Please recall a particular incident in which someone else had control or authority over you. This may be a situation in which someone had control over your ability to get something you wanted, or was in a position to lead or evaluate you. Please describe this situation in detail—what happened, how you felt, etc.

Participants in the control condition were told the following:

Please recall your day yesterday. Please describe your experiences yesterday in detail—what happened, how you felt, etc.

Interactional empowerment manipulation

For manipulation of the interactional empowerment, participants were presented with a CNN news report about how social media have empowered users (high power condition) or restricted users (low power condition) to gain control over their interaction with organizations. Participants in the control condition read a neutral report about how
social media have contributed to small business growth. Participants were randomly assigned to read one of the three stories. The story pages were designed to mock the same format of the CNN webpage. Each story also had a highlight section, where key points in the article were emphasized. The three stories were exactly the same except for the key words that manipulated the central argument. The three news conditions are presented in Appendix C.

To reinforce the manipulation of interactional empowerment, participants were presented with two reading comprehension questions after reading the article. Both questions asked participants to select a statement that represented the opinions in the article. Five choices were given for each question: 1) a highlight statement from story one, 2) a highlight statement from story two, 3) a highlight statement from story three, 4) none of the above, and 5) all of the above. The two reinforcement questions also serve the purpose of manipulation check: participants are expected to select the answers that correspond to their manipulation condition.

Measures

The manipulation check questions of high/ low interactional empowerment (inter-power) conditions was adopted from measured developed by Speer (2000) and adjusted to fit in the experimental context. Specifically, four statements measured participants’ perception of high inter-power manipulation, and two statements measured participants’ perception of low inter-power manipulation. The two “reading comprehension” questions serve as manipulation check and quality control measures.

For dependent measures, participants were first asked whether they choose to complain publicly via social media (e.g., Twitter or Facebook page) or not. This binary
question served as a filter for further exploring motivations for public complaint. To further explore motivations for public complaint, those that indicated intention for complaining online were then asked whether they choose to complain online to: 1) spread negative word-of-mouth about the restaurant (revenge), 2) to persuade potential customers not to come to the restaurant (revenge), 3) to publicize the poor behavior of the receptionist (revenge), 4) to warn others from suffering similar situations from the restaurant, and 5) to vent anger and frustration. *The first three response categories were defined as revenge behaviors,* and they serve as the main dependent measures. Those that indicated intention to complain online were also asked to write an actual complaint.

In addition, because the focal dependent variables involve complaining online or via social media, participants’ social media usage was measured as a control variable. Background information including age and comfort with social media were also collected. Finally, participants were asked to guess the purpose of the study. This question serves as a filter to avoid responses with demand characteristics.

All questions are presented in Appendix B.

**Data collection and participants**

*Data collection and sample*

Same as Study 1, an online experiment was designed using Qualtrics and a link was distributed through the Amazon Mechanical Turk website. A total of 641 responses were collected. For sample selection, different from study 1, study 2 used a higher qualification standard by asking that at least 95% of the tasks done by a worker had been approved by requesters. Other qualification criterion such as “MTurk Masters” is not
applicable for research purposes (Bates & Lanza, 2013). The workers’ location was restricted to the United States.

To ensure data quality, an attention check questions was included where the participants were explicitly asked to select “agree” as their answers (see Appendix B). Those who missed the attention check questions were excluded from the final sample. In addition, the two reinforcement questions were also checked to ensure successful manipulation. Participants are expected to select the answers that correspond to their manipulation condition. Those who failed either or both of the two questions were eliminated from the final sample. Moreover, the worker IDs and respondents’ IP addresses were carefully monitored to exclude any duplicate responses.

After filtering through all the above-mentioned exclusion criteria, a final sample of 273 effective responses were retained, generating an effective response rate of 42.59%.

Participants

The final sample consisted of 53.8% male and 46.2% female. As shown in Table 3.2, the respondents’ average age was 36 (SD = 12.77). The majority of the respondents indicated themselves as being non-Hispanic White (79.9%), with a bachelor’s degree (41.0%), and having an annual income of below $40,000 (52.0%).

Table 3.2 Demographics and descriptive statistics for Study 2

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (M=36, SD=12.77)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>53.8%</td>
<td>147</td>
</tr>
<tr>
<td>Female</td>
<td>46.2%</td>
<td>126</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>8.1%</td>
<td>22</td>
</tr>
<tr>
<td>Black/(non-Hispanic)</td>
<td>6.2%</td>
<td>17</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>4.8%</td>
<td>13</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>79.9%</td>
<td>218</td>
</tr>
<tr>
<td>Education</td>
<td>Other</td>
<td>%</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
<td>----</td>
</tr>
<tr>
<td>Less than high school</td>
<td>1.1%</td>
<td>3</td>
</tr>
<tr>
<td>High school/ GED</td>
<td>7.3%</td>
<td>20</td>
</tr>
<tr>
<td>Some college</td>
<td>22.0%</td>
<td>60</td>
</tr>
<tr>
<td>Associates degree</td>
<td>12.5%</td>
<td>34</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>41.0%</td>
<td>112</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>11.7%</td>
<td>32</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>2.2%</td>
<td>6</td>
</tr>
<tr>
<td>Professional degree</td>
<td>2.2%</td>
<td>6</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,000 or under</td>
<td>24.9%</td>
<td>68</td>
</tr>
<tr>
<td>$20,001 to $40,000</td>
<td>27.1%</td>
<td>74</td>
</tr>
<tr>
<td>$40,001 to $60,000</td>
<td>17.9%</td>
<td>49</td>
</tr>
<tr>
<td>$60,001 to $80,000</td>
<td>12.8%</td>
<td>35</td>
</tr>
<tr>
<td>$80,001 to $100,000</td>
<td>8.1%</td>
<td>22</td>
</tr>
<tr>
<td>$100,000 and higher</td>
<td>7.0%</td>
<td>19</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>2.2%</td>
<td>6</td>
</tr>
</tbody>
</table>

**Procedure**

The experiment was carried online through Qualtrics. Data were collected via the Amazon Mechanical Turk Panel. Prior to the main study, a pretest was conducted to verify the study manipulation and measurement instrument. Minor adjustments were made. In the main study, participants were told that the study consisted of two parts. Part I aimed to evaluate the relationship between reading comprehension and writing. Part II was a separate study about how consumers react to service failures. After reading the consent form, they were lead to the two prime conditions followed by the manipulation check questions.

To avoid order effect, participants were randomly assigned to one of the nine experimental conditions (high intra/high inter, high intra/low inter, high intra/inter control, low intra/high inter, low intra/low inter, low intra/intra control, intra control/high inter,
intra control/low inter, intra control/inter control). In addition, to counter balance the potential influence of one priming condition over the other, half of the participants were presented the intrapersonal prime prior to the news report prime, while the other half of the sample were presented the news report prime first. The order of the two prime conditions was also randomized in the study.

Following the two prime conditions, participants were then presented with the following hypothetical scenario in which their expectations were not met.

You invited some close friends to attend your birthday dinner at a popular local restaurant. You made a dinner reservation on the restaurant’s website for a table of 10 at 7 p.m. Everyone showed up on time and the restaurant was packed. However, the receptionist told you that they did not receive your reservation, and they could not set aside a large table for you. You said you made the reservation online a week ago and the website confirmed your reservation. Without showing any compassion or intent to resolve the issue, the receptionist very coldly brushed you off saying unfortunately they couldn't accommodate your request at this time, and you and your friends had to wait for approximately an hour to be seated. You asked to talk to the manager and you were told the manager was too busy to talk with you. You and your friends were simply told to wait, standing by the front entrance, for an hour to be seated.

The scenario was carefully designed and verified through the pretest to ensure that it was severe enough to generate dissatisfaction among almost all respondents.
After reading the hypothetical scenario, participants were then asked whether they choose to complain publicly online or via social media, followed by other dependent measures. Control measures and demographic questions were then presented. Finally, participants were asked to guess the purpose of the study. This question served as a filter to avoid responses with demand characteristics.
Chapter Four

Results

This study had three major inquiries: 1) Do social media empower people? 2) How are the emotive antecedents and behavioral outcomes related to each other in a service failure situation? 3) Will psychological empowerment trigger revenge behaviors? These three inquiries lead to 16 hypotheses and two research questions, which were answered through two studies. The first two inquiries were answered through an online survey where participants recalled their own experience of a recent service failure encounter. The third question was answered through an online experiment where various empowerment levels were controlled and imposed to the participants. Findings of both studies are discussed separately below.

Study 1: Survey

Because the hypothesis testing involves relationships between multi-level, multi-dimensionality latent constructs, latent variable path analysis (also known as the structural equation modeling approach) was conducted with Mplus 7 under MLR estimation to test the hypothesized latent variable relationships. To test the hypothesized relationships, three sets of models were independently estimated. In the following sections, result for each model will be discussed via three parts: model identification, measurement model evaluation and respecification strategies, and structural model evaluation.
Modeling 1: Social media use and psychological empowerment

Model specification

Specifically, because the measures for active and passive social media use are not construct based, the measurement portions of these two variables are of less interest. Thus, to reduce model error, the four items measuring active usage and the three items measuring passive use were each averaged to form a single index. The latent variables active use and passive use were then each indexed by a composite variable. This procedure would have caused the measurement portion of the model to be under-identified without further constraints. To solve this identification problem, a common approach as suggested by Keith (2006) was adopted by constraining the error-unique variance of the measured variable to \((1- r)*V\), in which \(r\) is the reliability of the observed variable, and \(V\) is the variance of the observed variable. Such a procedure would create a good estimate of the variance in the observed variable (the indicator) that could only be attributed to the error term. For example, the reliability of active use was .90, and its variance was 3.14. Hence, the estimate of error variance for active use was calculated as: \((1 - .90)*3.14 = .31\). The error variance for passive use was formulated in the same fashion and then fixed in the model.

For the intrapersonal and interactional empowerment measures, the measurement model is of focal interest to this study. Assessing scale validity and dimensionality is of high interest because the scales were adapted to the social media context. Thus, the full measurement portion of the model was evaluated with intrapersonal empowerment being a second order construct indexed by three first order factors of control, self-efficacy, and perceived competence. Each factor was then measured by four or five individual items.
Similarly, interactional empowerment was modeled as a second-order construct with two first order factors of collective action and interpersonal relationships, both of which were measured by three items. In addition, in specifying the model, latent intrapersonal empowerment and interactional empowerment were allowed to correlate due to the consideration that both were measures of the psychological empowerment construct, which would have been a third order factor if modeled.

Measurement model evaluation and respecification strategies

A confirmative factor analysis (CFA) was first conducted to assess the measurement portion of the model with all structural paths being saturated. Because the scales were adapted from the literature, the observed variables were expected to load on only one factor and error terms were not allowed to covary. Results showed that all indicators loaded significantly on the corresponding latent construct ($p < .001$). Overall, the measurement model fit was good across most goodness-of-fit indexes: $\chi^2$/degree of freedom ratio was 1.77 ($\chi^2 = 354.07$, df = 200), root mean square error of approximation (RMSEA) was .04 (.04, .05), comparative fit index (CFI) was .95, SRMR was .05 and Tucker-Lewis index (TLI) was .94. However, the modification indices indicated a weakness with two of the five items in the control dimension of the intrapersonal empowerment scale. Large modification indices were found associated with the error terms of these two items. To further explore this issue, an explorative factor analysis (EFA) was conducted with Varimax rotation of all fourteen intrapersonal empowerment items. The EFA result indicated a three-factor solution with each item loading on the correct corresponding construct, but for the same two items identified problematic in the control dimension in the CFA analysis. The results of CFA and EFA both indicated that
these two items should be discarded from the analysis to improve measure validity and reliability. The adjusted measure slightly improved the scale reliability, but greatly enhanced overall model fit. The retained final scale items can be found in Table 4.1.

**Table 4.1**

**Confirmatory factor loadings, reliability and descriptive statistics for Study 1**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Indicators</th>
<th>Std.*</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive use</td>
<td>I watch videos or pictures posted on social media sites.</td>
<td>.90</td>
<td>.01</td>
</tr>
<tr>
<td>(M= 4.86 SD=.161 α = .81)</td>
<td>I read online discussions on social media sites.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>I read user comments/ratings/reviews on social media sites.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Active use</td>
<td>I comment on others’ posts on social media sites.</td>
<td>.95</td>
<td>.00</td>
</tr>
<tr>
<td>(M= 3.94 SD=.177 α = .90)</td>
<td>I “like” posts on companies’ Facebook sites (clicking the like button).</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>I share contents on social media sites with my connections.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>I post contents on my own social media page.</td>
<td>.80</td>
<td>.03</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>I can remain calm when facing difficulties because I can rely on my coping abilities.</td>
<td>.73</td>
<td>.04</td>
</tr>
<tr>
<td>(M= 5.33 SD=.93 α = .89)</td>
<td>No matter what comes my way, I am usually able to handle it.</td>
<td>.80</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>I am confident that I could deal efficiently with unexpected events.</td>
<td>.85</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Thanks to my resourcefulness, I know how to handle unforeseen situations.</td>
<td>.79</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>I consider myself to be generally more capable of handling difficult situations than others.</td>
<td>.76</td>
<td>.03</td>
</tr>
<tr>
<td>Perceived competence</td>
<td>I am often a leader in groups.</td>
<td>.79</td>
<td>.04</td>
</tr>
<tr>
<td>(M= 4.52 SD=.19 α = .78)</td>
<td>I find it very hard to talk in front of a group. (R)</td>
<td>.53</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>I can usually organize people to get things done.</td>
<td>.80</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Other people usually follow my ideas.</td>
<td>.75</td>
<td>.03</td>
</tr>
<tr>
<td>Control</td>
<td>I enjoy making my own decisions.</td>
<td>.68</td>
<td>.07</td>
</tr>
<tr>
<td>(M= 5.60 SD=.91 α = .65)</td>
<td>I prefer a job where I have a lot of control over what I do and</td>
<td>.69</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>when I do it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I would rather run my own business and make my own mistakes than listen to someone else’s orders.</td>
<td>.58</td>
<td>.06</td>
</tr>
<tr>
<td>Collective action</td>
<td>Power in the online community lies in the relationships between people.</td>
<td>.80</td>
<td>.03</td>
</tr>
<tr>
<td>(M= 5.08 SD=.10 α = .78)</td>
<td>A person becomes powerful through other people in the online community.</td>
<td>.71</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>The only way I can have power in the online community is by connecting with others.</td>
<td>.68</td>
<td>.05</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Only by working together can people get power to exert influence in the online community.</td>
<td>.77</td>
<td>.04</td>
</tr>
<tr>
<td>relationships</td>
<td>I can have a voice in wider social issues by working in an organized way with other members of an online community.</td>
<td>.64</td>
<td>.05</td>
</tr>
</tbody>
</table>
**Structural model evaluation**

A nested model approach was used in testing the research question and hypotheses. In the first model 1 (Figure 4.1), *active use* was regressed as the exogenous variable predicting both intrapersonal and interactional empowerment. The two paths from passive use to the dependent variables were both constrained to zero. In the second model (Figure 4.2), *passive use* was regressed as the exogenous variable predicting both intrapersonal and interactional empowerment. The two paths from active use to the dependent variables were both constrained to zero. The first two models allowed for independent examination of the effect of active and passive use on both empowerment constructs. Estimation of both models returned equivalent, good model fit. The first model showed that active use was positively related to both intrapersonal empowerment $\beta_1 = .05$ ($B = .11$, SE$=.06$, $p < .05$) and interactional empowerment $\beta = .11$ ($B = .23$, SE$=.06$, $p < .01$). The second model showed that passive use was positively related to interactional empowerment $\beta = .10$ ($B = .17$, SE$=.07$, $p < .05$), but not intrapersonal empowerment $\beta = .05$ ($B = .10$, SE$=.06$, $p = .14$). Thus, both Hypothesis 1 and Hypothesis 2 were supported. In addition, the standardized path coefficient from active use to interactional empowerment ($B = .23$) was larger than standardized path coefficient from passive use to interactional empowerment ($B = .14$), which supported Hypothesis 3.

---

Note. * Standardized path coefficients. All coefficients are significant at $p < .001$. Composite scores were used for active and passive use, so the item loadings were not estimated.

1 $\beta$ represents unstandardized path coefficients, and $B$ represents standardized path coefficients.
To test for the robustness of this result, a third model was tested with both active use and passive use being exogenous variables predicting intrapersonal and interactional empowerment (Figure 4.3). In this model, latent active use and passive use were allowed to freely correlate, and so were latent intrapersonal empowerment and interactional empowerment. All other regression paths were allowed to freely estimate as well. This model allows for examination of the “unique” contribution of each exogenous variable on the dependent variable while controlling for the effect of the other exogenous variable. Overall, the structural equation modeling results suggested good model fit: CFI = .96,
TLI = .95, RMSEA = .04 (.03, .05), SRMR = .05, $\chi^2 (161, N=371) = 267.78, p<.001$.

However, the combined model did not significantly improve overall model fit ($\Delta \chi^2$ not significant). As shown in Figure 4.3, the results indicated only the path from active use to interactional empowerment was significant ($B = .25, p < .05$). This confirmed the robustness of Hypothesis 1 and Hypothesis 3.

![Figure 4.3 Nested model with passive use and active use freely estimate](image)

**Figure 4.3 Nested model with passive use and active use freely estimate**

It should be noted that in all three respecified structural models, the first order factors of control, self-efficacy, and perceived competence all loaded significantly on intrapersonal empowerment. Similarly, the two first order factors of collective action and interpersonal relationships both loaded significantly on interactional empowerment. These results confirmed the construct validity of intrapersonal empowerment and interactional empowerment.

**Modeling 2: Direct effect and indirect effect analysis**

To test the hypothesized mediation model, structural equation modeling was performed with Mplus version 7, under maximum likelihood (ML) estimation. As with model 1, the two-step procedure suggested by Anderson and Gerbing (1988) was
followed, in which the measurement model was first assessed and then the structural model was analyzed.

**Model specification**

Anger and dissatisfaction were each indicated by three items. Desire for revenge was measured by five items, and desire for avoidance was measured by four items. The outcome variables include 1) patronage reduction (exit), measured by four indicators; 2) negative word-of-mouth (voice), measured by three indicators; 3) vindictive complaining (revenge), measured by three indicators; and 4) online public complaining (revenge), measured by three indicators. The control variables included in the model were: age, gender, ethnicity (dummy coded), education (dummy coded), income (dummy coded), failure severity (latent indicated by three items), and relationship length (observed). To reduce model complexity, empowerment constructs were excluded from the mediation analysis.

**Measurement model evaluation and respecification strategies**

A confirmatory factor analysis (CFA) was conducted with MLR estimation to evaluate the full measurement model. All structural paths were saturated, a procedure that allows for independent evaluation of the measurement part of the model. Results showed that all indicators loaded significantly on the corresponding latent construct ($p < .001$), except for the second item measuring online public complaining for negative publicity (“After the service failure, I complained about my experiment online to report my experience to other consumer.”) Thus, this item is excluded from further analysis.

Overall, the measurement model demonstrated adequate fit: RMSEA (Root Mean Square Error of Approximation) = 0.04 (0.04, 0.05), CFI = 0.95, and TLI = 0.93.
However, other goodness-of-fit indexes were not satisfactory: $\chi^2 = 1103.15$ (df = 640), $p < .001$, $\chi^2 /df$ ratio = 17.2, SRMR (Standardized Root Mean Square Residual) = 0.14. To improve measurement precision and to respecify the model, the results were examined from two aspects: modification indices and localized area of strain (Kline, 2006).

1) Modification indices

Modification indices index the amount of Chi-square value decrease if the relationship between two items is allowed to freely estimate. Modification values larger than four indicate a significant Chi-square value decrease of the overall model fit. Inspection of the modification indices indicated weaknesses in the following items: the first and fourth item for desire for avoidance, the first item for failure severity, the fourth item for exit, the third item for word-of-mouth, the first item for vindictive complaining, and the second item for online complaining. Large modification indices were found associated with the error terms among these items. Correlated error terms suggest there are factors other than those specified in the model that account the relationship between the corresponding latent construct. Unless there is strong theoretical rationale explaining this relationship, correlated error terms are generally not expected and they suggest weaknesses in the measure precision.

2) Localized area of strain

In checking the localized area of strain, correlation residuals and standardized residuals were inspected. The correlation residuals represent the discrepancy between sample correlation and the model implied correlations. Hunter and Gerbing (1982) suggested that correlation residual values that exceed .10 should be concerned; values that exceed .15 are problematic. Standardized residuals were also inspected and
compared to the critical value of 1.96. Checking the residuals and standardized residual values allows detection of items that should raise a red flag. Visual inspection revealed that most of the problematic values were concerned with a few indicators: second item for anger, third item for dissatisfaction, first item for failure severity, the first and fifth item for desire for revenge, the second item for online complaining, and the third item for word-of-mouth.

Overall, the modification indices and residuals pointed to a similar set of indicators that should raise a red flag. Thus, in the respecified model, the above-mentioned eleven indicators were removed. A CFA was run again on the adjusted measurement model. Results showed significant improvement of model fit: $\chi^2 = 297.97$ (df = 255, $p < .001$), $\Delta \chi^2 = 805.18$ (df = 385, $p < .001$), RMSEA (Root Mean Square Error Of Approximation) = 0.02 (0.01, 0.03), CFI = 0.99, TLI = 0.99, SRMR (Standardized Root Mean Square Residual) = 0.12. Therefore, this respecified model was retained in the structural model evaluation.

The final retained scale items and their confirmatory factor loadings can be found in Table 4.2.

**Table 4.2**

**Confirmatory factor loadings, reliability and descriptive statistics for Study 2**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Indicators</th>
<th>Std.*</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>Through the service failures, I felt outraged.</td>
<td>.90</td>
<td>.02</td>
</tr>
<tr>
<td>(M= 5.35, SD= 1.35, $\alpha = .86$)</td>
<td>Through the service failures, I felt angry.</td>
<td>.90</td>
<td>.02</td>
</tr>
<tr>
<td>Dissatisfaction</td>
<td>Through the service failures, I felt dissatisfied.</td>
<td>.88</td>
<td>.02</td>
</tr>
<tr>
<td>(M= 6.24, SD= .76, $\alpha = .83$)</td>
<td>Through the service failures, I felt displeased.</td>
<td>.93</td>
<td>.02</td>
</tr>
<tr>
<td>Desire for revenge</td>
<td>I wanted to cause inconvenience to the company.</td>
<td>.88</td>
<td>.01</td>
</tr>
<tr>
<td>(M= 4.12, SD= 1.73, $\alpha = .95$)</td>
<td>I wanted to punish the company in some way.</td>
<td>.91</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>I wanted to make the company get what it deserves.</td>
<td>.95</td>
<td>.01</td>
</tr>
</tbody>
</table>
Desire for avoidance (M = 5.43, SD = 1.54, α = .93)
I wanted to avoid frequenting the organization.  .91 .02
I wanted to cut off my relationship with the organization.  .92 .02

Exit (M = 4.63, SD = 1.81, α = .90)
I spent less money with this company.  .86 .02
I stopped doing business with this company.  .84 .02
I reduced frequency of interaction with this company.  .83 .02

Voice-NWOM (M = 4.80, SD = 1.72, α = .90)
I spread negative word-of-mouth about the company.  .93 .02

Revenge online (M = 6.25, SD = 1.72, α = .63)
I complained about my experience online to make public the behaviors and practices of the company.  .80 .08
I complained about my experience online to spread the word about my misadventure.  .98 .06

Revenge offline (M = 3.55, SD = 1.77, α = .90)
I complained to the company or its employee to be unpleasant with them.  .82 .03
I complained to the company or its employee to make them suffer for their services.  .94 .03

Failure severity (M = 4.60, SD = 1.64, α = .89)
Small inconvenience – big inconvenience  .80 .03
Minor aggravation – major aggravation  .91 .03

Perceived betrayal (M = 5.03, SD = 1.41, α = .84)
I felt cheated.  .73 .04
I felt betrayed by the company.  .88 .03
The company broke the promise made to me.  .78 .04

Note. * Standardized path coefficients. All coefficients are significant at p < .001.

Structural model evaluation

The structural model was estimated based on the respecified measurement model. In addition, a few adjustments were made: 1) To reduce model complexity, a few non-significant control variables were excluded from the analysis. 2) To avoid non-convergence issues, two categorical variables, income and education, were each dummy recoded into two categories. Specifically, income was dichotomized into two groups: low income (less than $40,000) and high income (above $40,000), with the low income group being the reference group. Education was dichotomized into “no college degree” (reference group) and “college degree or higher education”.
The nested model approach was used to test H4 to H11, as well as to identify the best-fitting model. In the full model (baseline model), as depicted in Figure 4.5, the four outcome variables were each regressed on anger, dissatisfaction, desire for revenge, and desire for avoidance. Desire for revenge and desire for avoidance were also each regressed on anger and dissatisfaction. Meanwhile, because the two exogenous variables both expressed negative emotions, they were allowed to freely correlate. Considering that a person in a service failure situation may retain both desires of avoidance and revenge, these two variables were allowed to freely correlate as well. In addition, the model controlled for age, gender, ethnicity, education, income, failure severity, and relationship length on both the dependent variables and the mediating variables. The empowerment constructs were not included in this model.

To test for the direct effects of anger (H4) and direct effects of dissatisfaction (H5) on the dependent outcomes, the baseline model was restricted by fixing the 12 indirect paths through the two mediators to zero. The covariance between the two mediating variables was also set to zero. This procedure allows for examination of the direct effects of the emotional antecedents on behavioral outcomes while removing the influence the mediators. Overall, the fit of the restricted model was not good: $\chi^2 = 848.20$ (df = 231), $p < .001$, $\chi^2$/df ratio = 3.67, RMSEA = .09 (.08, .09), CFI = .87, TLI = .84, SRMR = 0.19. The model fit was significantly worse than the measurement model. This result hints that the restricted model does not explain well the relationships among the study variables. It will only be used to extract the direct effects.

Hypothesis 4 predicted that anger has significant direct effects on a) patronage reduction (exit), b) negative word-of-mouth (voice), c) online public complaining
(revenge), and d) vindictive complaining (revenge) behaviors. As shown in Figure 4.4, three of the four predicted direct effects are significant: the path coefficient from anger to negative word-of-mouth, $\beta = .32$ ($B = .27$, S.E. = .08), $p < .001$; the path coefficient from anger to online public complaining, $\beta = .27$ ($B = .49$, S.E. = .22), $p < .05$; and the path coefficient from anger to vindictive complaining, $\beta = .36$ ($B = .33$, S.E. = .09), $p < .001$. Thus, H4b, H4c, and H4d were supported.

Hypothesis 5 predicted that dissatisfaction has significant direct effects on a) patronage reduction (exit), b) negative word-of-mouth (voice), c) online public complaining (revenge), and d) vindictive complaining (revenge) behaviors. As shown in Figure 4.4, only one of the four predicted direct effects was significant: the path coefficient from dissatisfaction to negative word-of-mouth, $\beta = .36$ ($B = .15$, S.E. = .07), $p < .05$. Thus, only H5b is supported.

**Figure 4.4 Direct effects model**

To test for H6 to H11, the full mediation model was analyzed by allowing the previously restricted regression paths to freely estimate (see Figure 4.5). The effects of
the control variables were set on both the dependent outcomes and the mediators. The
indirect effects were also requested. Results showed that the full mediation model was a
much better fit than the restricted direct effects model, $\chi^2 = 228.03$ (df = 204), $p < .001$, $\chi^2$
/df ratio = 1.12, $\Delta\chi^2 = 612.17$ (df = 27, $p < .001$). It is also a significant improvement
from the measurement model, $\Delta\chi^2 = 69.94$ (df = 51, $p < .05$). The overall model fit was
very good across most other modification indices, RMSEA = .02 (.00, .03), CFI = .99,
TLI = .99, SRMR = 0.10.

H6 predicted that desire for revenge was positively related to: a) negative word-
of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining
(revenge) behaviors. As expected, the regression path from desire for revenge to negative
word-of-mouth was significant, $\beta = .24$ (B = .24, S.E. = .07), $p < .001$; as was the
regression path from desire for revenge to vindictive complaining, $\beta = .45$ (B = .49, S.E.
= .07), $p < .001$, supporting H6a and H6c. However, the path to online public
complaining was not significant, thus H6b was not supported. Although not projected
from the hypothesis, a significant negative effect was observed from desire for revenge to
patronage reduction, $\beta = -.15$ (B = -.14, S.E. = .07), $p < .05$.

H7 predicted that desire for avoidance was positively related to: a) patronage
reduction (exit), and b) negative word-of-mouth (voice). As expected, the regression path
from desire for avoidance to patronage reduction was significant, $\beta = .90$ (B = .73, S.E.
= .05), $p < .001$; as was the regression path from desire for avoidance to negative word-
of-mouth, $\beta = .20$ (B = .16, S.E. = .07), $p < .01$. H7a and H7b were both supported.
Although not projected from the hypothesis, a significant direct effect was observed from
desire for avoidance to online public complaining, $\beta = .12$ (B = .27, S.E. = .11), $p < .05$. 
Figure 4.5 Indirect effects model

H8 to H11 predicted indirect effects. Testing indirect effect, sometimes labelled as the mediation effect, in a complicated SEM model could be challenging. Arguably one of the most influential approaches, the causal steps approach (Baron & Kenny, 1986) assumes that in a simple X-M-Y mediation relationship, the following three conditions must be met: 1) X is significantly related to Y; 2) X is significantly related to M; 3) M is significantly related to Y. A full mediation holds true if the relationship between X and Y becomes non-significant after adding the mediator to the model. Although the causal steps approach is still frequently employed by social science researchers, there are problems with its underlining assumptions. Mediation, by this definition, is logically inferred by a set of hypothesis testing. However, it is possible to have an indirect effect significantly different from zero with one constituent path not being significant (Hayes, 2009). In other words, the causal steps approach assumes there to be an effect (i.e., significant total effect) to be mediated. Indirect effect differs from mediation effect in that it does not require the existence of the total effect (Hayes, 2009). In addition, the causal steps approach is often tested with the Sobel Test, which assumes indirect effect to be
normally distributed, a condition that rarely happens. Moreover, the causal steps approach has low power and it becomes extremely inflexible for complex designs with more than one independent variable, mediation, or dependent variable.

Based on the above consideration, an alternative approach was sought after by using bootstrapping technique to test the indirect effects in the model. Bootstrapping is a resampling technique that does not assume normal distribution of the sample data; thus, it is generally recommended for testing non-normal data. It is also extremely flexible to apply to complex models. In terms of power, bootstrap is better. It also reduces the Type I error rate, and thus, is more conservative. Given the above considerations, bootstrapping was proper for estimation purposes in this study.

Estimation of the indirect effect is based on the same structural model used for testing H6 and H7. The only difference was to require bootstrapping with 2000 iterations. Of all the predicted indirect effects from H8 to H11, four were found significant. Anger had a significant indirect effect through desire for revenge on both negative word-of-mouth ($\beta = .23, B = .19, S.E. = .06, p < .001$) and vindictive complaining ($\beta = .35, B = .32, S.E. = .06, p < .001$). Anger also had a significant indirect effect through desire for avoidance on the exit outcome, patronage reduction ($\beta = .22, B = .18, S.E. = .08, p < .05$). Moreover, dissatisfaction had a significant indirect effect on patronage reduction through desire for avoidance ($\beta = .37, B = .15, S.E. = .07, p < .05$). Thus, H8, H10, and H11 were partially supported. H9 was not supported.

To test H12 and H13, a separate model was run with perceived betrayal as the only exogenous variable. The emotive variables and desire for avoidance were removed for model simplicity. In this perceived betrayal model (see Figure 4.6), the same set of
four behavioral outcomes were examined. They were each regressed on perceived betrayal and desire for revenge. Desire for revenge was also regressed on perceived betrayal. This composed a simple mediation model; thus, it does not require bootstrapping for examining the indirect effects. The same two-step procedure was followed in fitting this model: CFA first and then the structural model evaluation. The CFA results revealed weakness with the fourth indicator of perceived betrayal, so it was removed from further analysis. Structural model evaluation showed that there was a significant direct effect from perceived betrayal to both negative word-of-mouth ($\beta = .21$, B = .14, S.E. = .07, p < .05) and to vindictive complaining ($\beta = .24$, B = .18, S.E. = .08, p < .05). H12a and H12b were supported. In addition, two indirect effects were found statistically significant: 1) indirect effect from perceived betrayal to negative word-of-mouth through desire for revenge ($\beta = .22$, B = .15, S.E. = .03, p < .001); 2) indirect effect from perceived betrayal to vindictive complaining through desire for revenge ($\beta = .25$, B = .18, S.E. = .04, p < .001). Thus, H13a and H13b were supported.

Figure 4.6 Perceived betrayal model
Modeling 3: Moderation analysis

H14 predicted a moderating effect of psychological empowerment on a) negative word-of-mouth (voice), b) online public complaining (revenge), and c) vindictive complaining (revenge) behaviors. Highly empowered individuals are more likely to engage in voice and revenge behaviors. This prediction involves latent variable interaction, which is quite challenging to specify in a complex SEM model. Traditionally, moderating analysis involving continuous predictors can be achieved in regression analysis. However, just like any other model estimation with the regression approach, the measurement errors of the latent constructs were not accounted for.

To solve this dilemma, two simplified moderation models were tested under the SEM framework with Mplus. The focal interest in H14 was to test whether power increases the likelihood to behave – i.e., to take confrontation responses. Based on the findings of the previous hypotheses, the key players in this overall relationship were anger, negative word-of-mouth, vindictive complaining, and online public complaining. Therefore, only these variables were retained in the moderation model, along with the empowerment constructs. The intrapersonal empowerment and interactional empowerment were both second order variables, each measured by two or three factors. They were essentially two different constructs with quite unique characteristics. Thus, these two constructs were modeled independently to examine the interaction effects with the previously mentioned variables (see Figure 4.7 and Figure 4.8 for illustration).
Figure 4.7 Moderation model of interactional empowerment

Figure 4.8 Moderation model of intrapersonal empowerment
There are a few ways to analyze latent interaction in SEM, such as the mean structure approach (Jöreskog & Yang, 1996), the constrained approach (Algina & Moulder, 2001), and the unconstrained approach (Marsh, Wen, & Hau, 2004). This study uses the unconstrained approach, following the procedure suggested by March, Wen, Hau and Nagengast (2013), as detailed below.

Just as in multiple regression, a latent product variable is formed by pairs of matching product indicators from the independent variable and the moderator. To solve convergence problems, all independent indicators should be population-mean-centered in the latent interaction model. The product of the centered indicators is then used to define the latent interaction term. When the two latent factors are each measured by three indicators, as is the case with intrapersonal empowerment, then the matched pair strategy can be used to form product indicators. However, for the model of interactional empowerment (Figure 4.7), in which anger was indexed by three indicators (anger1, anger2, anger3) and the moderator was indexed by two indicators (b1, b2), three product indicators were required to make the overall model identified. Three combinations of anger1*b1, anger2*b2, and anger3*b1 were used. Finally, in the unconstrained approach, the mean of the latent product variable is constrained to be equal to the covariance of the two latent predictor variables (March et al., 2014).

As shown in Figure 4.7, the first model tested the moderation effect of interactional empowerment. The model fit the data quite well. The latent product variable was not significantly related to any dependent outcomes, thus rejecting the moderating effect of interactional empowerment. Neither was interactional empowerment.

---

2 The unconstrained approach requires only one constraining condition. The name “unconstrained” is compared to the constrained approach, which requires a much more complicated process of constraining four conditions.
significantly related to online public complaining. Consistent with the finding of H4, the three direct effect paths from anger to the dependent variables were all significant.

The second model, as shown in Figure 4.8, tested the moderation effect of intrapersonal empowerment. The model fit the data equally well. Results suggested there was a significant moderation effect of intrapersonal empowerment on online public complaining, with the regression path of the latent product variable significantly different from zero ($\beta = -.23$, $B = -.31$, S.E. = .14, $p < .05$). In addition, intrapersonal empowerment was also positively related to negative word-of-mouth ($\beta = .47$, $B = .22$, S.E. = .06, $p < .001$) and online public complaining ($\beta = .47$, $B = .45$, S.E. = .11, $p < .001$). Consistent with findings of H4, anger had significant direct effects on all three outcome variables.

**Study 2: Experiment**

**Manipulation Check**

4.1 Manipulation checks

Two sets of questions were designed to check the manipulations of high interactional empowerment and low interactional empowerment conditions separately. To prepare for the manipulation check, the four statements measuring high interactional empowerment and the two statements measuring low interactional empowerment were each averaged to form a single index, respectively. Following this procedure, two one-way ANOVA tests were conducted with the manipulation condition (high inter/ low inter/ inter control) being the grouping variable, and the two manipulation check composite variables as the dependent variable.
Significant mean differences were found among the three manipulation conditions for high power check question \(F(2, 270) = 41.54, p < .001\) and low power check question \(F(2, 270) = 38.31, p < .001\). To further evaluate pairwise mean differences among the three conditions, post hoc follow up tests were conducted using Tukey’s adjustment. Results showed that participants in the high inter-power condition \((M = 6.15, SD = .66)\) scored significant higher than participants in the low inter-power \((M_{\text{diff}} = 1.06, SE = .12, p < .001)\) and control \((M_{\text{diff}} = .74, SE = .12, p < .001)\) conditions. Meanwhile, participants in the low inter-power condition \((M = 4.08, SD = 1.31)\) scored significant lower than participants in the high inter-power \((M_{\text{diff}} = -1.44, SE = .17, p < .001)\) and control \((M_{\text{diff}} = -1.04, SE = .17, p < .001)\) conditions. Thus, manipulation of both high and low interactional power conditions were successful.

To check the manipulation of high and low intrapersonal empowerment conditions, the personal experiences written by the participants were carefully screened to make sure they indeed reflected empowering (high intra-power), depowering (low intra-power) or neutral (control) experiences. Responses that did not fit in the corresponding manipulation conditions were excluded from the final sample.

**Hypothesis Testing**

To test the two hypotheses and Research Question Two, a series of two-way Analysis of Covariances (ANCOVA) tests were performed. Participants’ social media use was included as the covariate. Interactional empowerment and intrapersonal empowerment were entered as the two factors. The first set of two-way ANCOVA tests used the five motivations respectively as the dependent variable: 1) to spread negative word-of-mouth about the restaurant (revenge), 2) to persuade potential customers not to
come to the restaurant (revenge), 3) to publicize the poor behavior of the receptionist (revenge), 4) to warn others from suffering similar situations from the restaurant, and 5) to vent anger and frustration. The first three motivations were categorized as revenge-oriented, while the latter two motivations are intentions with no harm.

Hypothesis 15 predicted that individuals primed with higher intrapersonal empowerment were more likely to punish a brand for poor behavior. Hypothesis 16 predicted that individuals primed for interactional empowerment were more likely to punish a brand for poor behavior. Research Question Two explored the interaction effect between intrapersonal empowerment and interactional empowerment. These predictions and research question can be checked by examining the main effects and interaction effects of the two-way ANCOVA analysis.

Some basic assumptions need to be checked before performing two-way ANCOVA: 1) the covariate should be linearly related to the dependent variable; 2) the variance of dependent variable should be equal across all groups, also known as homogeneity of observation. The first assumption was examined by checking the Pearson correlation between the covariate and each dependent variable. Results showed significant linear relationships (p < .05) between social media use and all dependent variables but the fourth one, “to warn others from suffering similar situations.” Thus, for the fourth dependent measure, a regular two-way ANOVA was performed without covariate. In checking the second assumption of homogeneity of observation, the Levene’s test was requested. Levene’s test is an inferential statistic that examines the equality of variances of a dependent variable for two or more groups. It tests the null hypothesis that the population variances are equal across all the groups, our second
assumption. A non-significant p value of the Levene’s test indicates no violation of this assumption. Results showed no significant result for any of the dependent outcomes. Thus, the second assumption was supported.

As shown in Table 4.3, no interaction effects were found for any of the four ANCOVA tests and the two-way ANOVA test. Thus, the focus was on the main effects only. Among the five tests, no mean effects were found with the intrapersonal factor, thus H15 was rejected. However, for interactional empowerment, there were significant main effects for two of the three dependent measures: 1) spread negative word-of-mouth about the restaurant (F(2, 191) = 4.31, p < .05), and 2) to persuade potential customers not to come to the restaurant (F(2) = 4.08, p < .05). Further analysis revealed that participants in the low-power condition reported less likely to engage in those two revenge-motivated online public complaining, and such differences were statistically significant (M_{diff} = .79, p < .05 for both tests).

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Iner-power High</th>
<th>Iner-power Low</th>
<th>Control</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I complained publicly online:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To spread NWOM (revenge).</td>
<td>5.47</td>
<td>4.97</td>
<td>5.76</td>
<td>(2, 191)</td>
<td>4.31</td>
<td>.02*</td>
</tr>
<tr>
<td>To persuade potential customers not to come to the restaurant (revenge).</td>
<td>5.36</td>
<td>4.96</td>
<td>5.76</td>
<td>(2, 191)</td>
<td>4.08</td>
<td>.02*</td>
</tr>
<tr>
<td>To publicize the poor behavior of the receptionist (revenge).</td>
<td>6.04</td>
<td>5.66</td>
<td>6.03</td>
<td>(2, 191)</td>
<td>1.90</td>
<td>.15</td>
</tr>
<tr>
<td>To warn others from suffering similar situations.</td>
<td>6.20</td>
<td>6.13</td>
<td>6.32</td>
<td>(2, 192)</td>
<td>.95</td>
<td>.39</td>
</tr>
<tr>
<td>To vent anger and frustration.</td>
<td>5.76</td>
<td>5.82</td>
<td>5.93</td>
<td>(2, 191)</td>
<td>.33</td>
<td>.72</td>
</tr>
</tbody>
</table>
Revenge response composite  5.62  5.20\(^a\)  5.85\(^b\)  (2, 191)  5.02  .01\(^{**}\)

*Note. Different superscripts (a/b) on the same row indicate conditions with significant mean difference. *\(p < .05\). **\(p < .01\).

To further explore the robustness of the result, the three dependent measures of revenge were averaged to form a composite variable. The composite variable was then used as the dependent outcome in a two-way ANCOVA. Participants’ social media use was included as the covariate. Interactional empowerment and intrapersonal empowerment were entered as the two factors. Both assumptions were checked and confirmed. Results showed similar patterns: no significant interaction effect or main effect for intrapersonal empowerment was detected. However, interactional empowerment had a significant main effect on the composite revenge outcome (\(F(2) = 5.02, p < .01\)). Further analysis revealed that participants in the low power condition reported lower scores than those in the control condition, and such differences were statistically significant (\(M_{\text{diff}} = .65, p < .01\)). Thus, it was concluded that H16 was supported.

A summary of all hypothesis testing results can be found in Table 4.4.

**Table 4.4 Summary of Hypothesis Testing Results**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong> Active social media use is positively related to interactional empowerment.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H2</strong> Passive social media use is positively related to interactional empowerment.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H3</strong> Effects found in H1 is stronger than effect in H2</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H4</strong> Direct effects of <em>anger</em> on:</td>
<td></td>
</tr>
<tr>
<td>a) patronage reduction (exit)</td>
<td>NS</td>
</tr>
<tr>
<td>b) negative word-of-mouth (voice)</td>
<td>Supported</td>
</tr>
<tr>
<td>c) online public complaining (revenge)</td>
<td>Supported</td>
</tr>
<tr>
<td>d) vindictive complaining (revenge)</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H5</strong> Direct effects of <em>dissatisfaction</em> on:</td>
<td></td>
</tr>
<tr>
<td>a) patronage reduction (exit)</td>
<td>NS</td>
</tr>
<tr>
<td>b) negative word-of-mouth (voice)</td>
<td>Supported</td>
</tr>
<tr>
<td>c) online public complaining (revenge)</td>
<td>NS</td>
</tr>
<tr>
<td>H6</td>
<td>Desire for revenge is positively related to:</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>a) negative word-of-mouth (voice)</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H7</td>
<td>Desire for avoidance is positively related to:</td>
</tr>
<tr>
<td></td>
<td>b) negative word-of-mouth (voice)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H8</td>
<td>Indirect effect of anger through desire for revenge on:</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H9</td>
<td>Indirect effect of dissatisfaction through desire for revenge on:</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H10</td>
<td>Indirect effect of anger through desire for avoidance on:</td>
</tr>
<tr>
<td></td>
<td>b) negative word-of-mouth (voice)</td>
</tr>
<tr>
<td>H11</td>
<td>Indirect effect of dissatisfaction through desire for avoidance on:</td>
</tr>
<tr>
<td></td>
<td>b) negative word-of-mouth (voice)</td>
</tr>
<tr>
<td>H12</td>
<td>Perceived betrayal is positively related to:</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H13</td>
<td>Indirect effect of perceived betrayal through desire for revenge on:</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H14</td>
<td>Moderating effect of psychological empowerment on:</td>
</tr>
<tr>
<td></td>
<td>b) online public complaining (revenge)</td>
</tr>
<tr>
<td></td>
<td>c) vindictive complaining (revenge)</td>
</tr>
<tr>
<td>H15</td>
<td>Individuals primed for intrapersonal empowerment are more likely to punish a brand for poor behavior.</td>
</tr>
<tr>
<td>H16</td>
<td>Individuals primed for interactional empowerment are more likely to punish a brand for poor behavior.</td>
</tr>
</tbody>
</table>
Chapter Five

Discussion

This dissertation introduces a social-media-based Service Failure Response Model that incorporates emotive antecedents, behavioral outcomes, a mediation process, and moderating factors. The model explored the response mechanism used when consumers encounter service failure situations followed by failed recovery. Largely built upon the work by Grégoire and his colleagues (Grégoire & Fisher, 2005; 2006; 2008; Grégoire et al., 2010; Grégoire et al., 2009), the model proposed emphasized a response mechanism within the context of social media and the Internet. It integrated the framework of psychological empowerment and introduced it into the overall relationship.

Empowerment facilitated by the social media is a timely and important phenomenon to study. Social media have brought significant changes to how people consume and correspond. The Internet gives people more buying choices, makes it easier to exit and switch, and facilitates conversations as never before. As a consequence, consumers are becoming more demanding for their relationships with brands online. Some consumers gain power through this change: they are using social media to exert personal influence and to punish organizations for wrong doings. In extreme cases, this power is abused. It accelerates activism. Some social issues are aggravated and people are becoming less tolerant but more irritable. The determining factor behind all these changes is power. Just as is stated in Chapter One, power is a fundamental concept for social science (Russell, 1938), in the same way that energy is for physics and logic is for mathematics. Thus, studying power is of vital importance to help us understand the changes brought by the new media.
Empowerment is a multi-level, open-ended construct that includes the individual level, organizational level, and community level (Hur, 2006; Peterson & Zimmerman, 2004; Zimmerman & Rapport, 1988; Zimmerman & Zahniser, 1991). Meanwhile, empowerment can be viewed as a process (Mo & Coulson, 2010) or an outcome (Hur, 2006; Perkins & Zimmerman, 1995; Zimmerman, 1995). This investigation focused on the empowerment process at the individual level. Specifically, the intrapersonal empowerment and interactional empowerment adopted from community psychology (Zimmerman, 1995) were introduced as two focal constructs that should be considered to fully capture the scope of psychological empowerment.

This study focused on a service failure situation, and it aimed to address three inquiries through two research studies: 1) Do social media empower people? 2) What drives people to take actions against unsatisfactory experiences, and what are the behavioral outcomes of such unsatisfactory experiences? 3) Will psychological empowerment trigger revenge behaviors? In other words, does power make us mean? This chapter discusses each question based on the empirical findings derived from two studies.

**Empowerment and Social Media Use**

Past research has examined empowerment in both offline and online settings. However, investigation of empowerment in the social media context is quite limited. This research aimed to bridge this gap by testing the association between active/passive use and perceived intrapersonal and interactional empowerment.

The first research question was proposed to address the relationships between active and passive social media use and intrapersonal empowerment. Existing literature
offered conflicting findings to this question, as some researchers found online media use to positively influence intrapersonal empowerment (e.g., Barak et al., 2008; Leung, 2009), while others found no effect (e.g., Petrovčič & Petrič, 2014). This study found only a weak association between active social media use and intrapersonal empowerment and no effect of passive use. It was also found that, after controlling for the effect of passive use, the weak relationship between active use and intrapersonal empowerment also disappeared. This finding is interesting in that it adds empirical evidence to both camps of the argument. Intrapersonal empowerment is the personal level measure that captures aspects of control, self-efficacy, and perceived competence (Zimmerman, 1995; Zimmerman & Zahniser, 1991). Theoretically, as a personal quality measure, intrapersonal empowerment emphasizes a personality trait that should be relatively stable across time. It seems unlikely that this personal trait will be easily altered by contextual influences. Yet, as argued by some researchers, given enough time and exposure, active participation on new media could increase the personal sense of self-efficacy and self-esteem, which could lead to greater personal empowerment (Barak et al., 2008). This is especially true for the “millennial” generation, born roughly after early 1980s, who were seen as growing up with the Internet and new technology and the use of social media has become a part of daily life (Lenhart, Purcell, Smith & Zickuhr, 2010). Given the immersion of social media and the strong dependency and attachment developed among young adults, the mixed findings suggest that social media influence the personal sense of control, efficacy, and competence. However, this effect takes time to develop and reveal itself, and, as the findings suggest, the effect may be more salient for certain demographics or usage patterns.
The survey study findings also supported positive associations between active and passive social media use and *interactional empowerment*. Empowerment theorists have cautioned the need for empirical investigation of the interactional aspect of empowerment (Speer, 2000; Zimmerman, 1995), yet this concern has not been fully addressed. The literature on empowerment has largely focused on the personal aspect of empowerment. This study contributes to this research gap by examining the interactional empowerment in the social media context. Interactional empowerment refers to one’s intellectual understanding of the social environment around them, the awareness of the options available to achieve goals, and the knowledge and resources required to produce change (Zimmerman, 1995). On social media, this definition transfers to an individual’s awareness of his/her influence over others online and the collective power that he/she may exert over organizations and societies through the online networks and the virtual communities. It also requires a familiarity with the new media platforms and a key understanding of the connectivity established in the virtual sphere. This study supported this argument by showing that various levels of social media usage indeed predict the interactional empowerment, and such effect is stronger for active use than passive use. *In other words, the more actively engaged the users are, the more empowered they feel.*

Overall, this study showcased social media engagement, especially active usage, as antecedent to psychological empowerment. It is worth noting that all the effects found related to social media use are relatively small, which is consistent with previous research (Leung, 2009; Petrovčič & Petrič, 2014). The small effect size is expected because psychological empowerment is formed by many individual, societal, and contextual
factors, of which social media use is only a small part. However, this small effect should never be overlooked, as it can create dramatic social changes.

**Cognition, Affect and Behavior**

The second study inquiry examined how emotive antecedents and behavioral outcomes were related in a service failure situation. This process could be explained by the cognition-affect (emotion)-behavior link.

In Study 1, two emotive variables were studied: anger and dissatisfaction. Anger was found to be a strong predictor of negative word-of-mouth, online public complaining, and vindictive complaining. The strongest bond was between anger and online public complaining: for every one standard deviation increase in anger, the likelihood to complain online via social media increased by about half of a standard deviation. This is a fairly considerable relationship. As for dissatisfaction, it was only weakly related to negative word-of-mouth. We can draw a few implications from these findings.

First, we can conclude that anger and dissatisfaction are different emotions that lead to different responses. This confirms with previous research (e.g. Bougie et al., 2003; Sánchez-García & Currás-Pérez, 2011). Anger as a stronger emotion often leads to more aggressive behaviors. People describe anger with feelings “as if they would explode” and “being overwhelmed by their emotions” (Bougie et al., 2003, p. 379). Indeed, anger was found related to aggression and hostile behaviors (Averill, 1982; Berkowitz, 1999). Thus, it makes sense that anger is associated with revenge behaviors, but not related to exit behavior, which is more passive.

Interestingly, dissatisfaction was found to be unrelated to most behavioral responses except for negative word-of-mouth (NWOM). This result is inconsistent with
prior studies (e.g., Bougie et al., 2003; Keaveney & Parthasarathy, 2001; Zeelenberg & Pieters, 1999; 2004). A likely explanation for this finding is that the effect of dissatisfaction was attenuated by anger. In the proposed model, anger and dissatisfaction were both regressed as the independent variables that were allowed to covary. So the regression path should really be interpreted as the effect of dissatisfaction on NWOM after controlling for the effect of anger. Given that anger is a stronger emotional reaction than dissatisfaction, it is very likely that anger has “taken away” the influence of dissatisfaction on other dependent outcomes. If dissatisfaction were to be regressed independently in the model, the direct effects could have been significant.

Beyond the explanation from the statistics point of view, there could be theoretical justifications that explain the different effects between anger and dissatisfaction. Some researchers argue that the construct of dissatisfaction has a cognitive nature. Unlike anger, dissatisfaction is more cognition than emotion. It could lead to negative emotions such as anger. Some researchers have tested for the mediation effect of anger between dissatisfaction and consumers’ behavioral responses (e.g., Bougie et al., 2003; Sánchez-García & Currás-Pérez, 2011). If such is the case – that anger would mediate the effect of dissatisfaction on the dependent outcomes – then similar results would be derived for the model.

The model also inspected the mediating process that leads affect to behaviors. Two variables were tested: desire for revenge and desire for avoidance. Desire for avoidance had a quite large effect when predicting exit behavior (see Figure 4.3). It also significantly transited the indirect effects of both anger and dissatisfaction to exit. These findings are congruent with theory: desire for avoidance is more passive in nature and
people with higher avoidance tendencies are less likely to take confrontation strategies (Grégoire et al., 2009). This argument also explains the findings that desire for avoidance was related to NWOM and online public complaining. Compared to face-to-face complaining, spreading NWOM offline and complaining publicly online are both less confrontational. Thus, for people who have higher avoidance tendencies, social media and the Internet provide them the channels to voice their resentment, which otherwise would be suppressed. In addition, desire for revenge was found to be positively related to NWOM and vindictive complaining. It also completely mediates the relationship between anger and vindictive complaining. This hints that NWOM, although defined in this study as a voice response, does have revenge characteristics.

There is another cognitive aspect examined in the model: perceived betrayal. Perception of betrayal was found to be a significant predictor of NWOM and vindictive complaining behaviors, and such effects were partially mediated by desire for revenge (see Figure 4.4). Unlike the emotional reaction to service failures, perceived betrayal involves cognitions that the relationship norms were violated by the company (Fitness, 2001; Ward & Ostrom, 2006). Compared to anger and dissatisfaction, betrayal is extremely difficult to forgive and forget, and thus, it is particularly influential in predicting revenge (Finkel et al., 2002; Grégoire & Fisher, 2008). This conclusion offers fruitful research areas for a comparison of anger, dissatisfaction, and betrayal in a relational context. For example, a revised model could be perceived betrayal $\rightarrow$ anger $\rightarrow$ desire for revenge $\rightarrow$ revenge behaviors.
Exit-Voice-Revenge Model

In examining behavioral responses, this study adopted the exit-voice-revenge model (Huefner & Hunt, 2000; Huefner et al., 2002). It was argued that exit, voice and revenge could be considered as means to strike the power balance between individuals and the organization. While exit is generally considered as a coping strategy to minimize emotions through avoidance, voice is a coping strategy intended to resolve the issue through complaining (Folkman & Lazarus, 1988; Mattila & Ro, 2008). What falls beyond this coping behavior is revenge. In particular, this study emphasized revenge responses and differentiated offline revenge (vindictive complaining) from online revenge (online public complaining). As a major claim of the study, online public complaining was considered as a revenge behavior because it publicized the service failure to a mass audience (Grégoire et al., 2010). One may amplify the seriousness of the issue, or frame it in such a way that it becomes a concern for others (Ward & Ostrom, 2006). By complaining publicly online, dissatisfied consumers often present the companies’ failures as violations of norms or betrayals and elevate the failure to a scale that deserves public outrage. Many complaints structure negative comments to persuade others to boycott the company or product (Laczniak et al., 2001).

Although this claim seems logical, and indeed has been confirmed by a few pioneering investigations (e.g., Grégoire et al., 2010), the findings of the survey study did not support it. H6b, which predicted desire for revenge was significantly related to online public complaining, was not supported. Neither was the indirect effect of anger through desire for revenge to online complaining held significant (H8b). There could be several explanations for these findings. First, this could be a power issue. Unlike the other three
dependent variables, online public complaining was measured through a filter question; only those who indicated that they had actually complained online after the service failure were directed to fill out the set of questions measuring online public complaining. This was only 17% (n=63) of the total sample (N=371). With such a small number of responses, it is difficult to detect the effect size unless it is substantial. A second possible explanation is with the construct’s definition. In Study 1’s setting, online public complaining was defined as “a public complaining behavior aimed for negative publicity to a mass audience online.” However, the scale that measured this construct did not quite reflect revenge motivation. The second item in the scale, “I complained about my experience online to report my experience to other consumers,” was not revenge-motivated. In fact, this weakness in the construct validity was detected in Study 1’s CFA analysis. This scale item did not significantly load on the corresponding construct. Although this item was later removed in the structural model evaluation, it also took away information needed to verify this construct.

Study 2 addressed this issue by expanding the online public complaining measures to include various motivations: 1) to spread negative word-of-mouth about the restaurant (revenge); 2) to persuade potential customers not to come to the restaurant (revenge); 3) to publicize the poor behavior of the receptionist (revenge); 4) to warn others from suffering similar situations from the restaurant; and 5) to vent anger and frustration. The first three motivations were categorized as revenge-oriented, while the latter two motivations were intentions with no harm. The results of Study 2 confirmed the construct validity and the claim about online public complaining as a revenge behavior.
Those who were primed with higher interactional empowerment reported greater likelihood of engaging in the online complaining behaviors motivated for revenge.

Attention should also be drawn to the negative word-of-mouth construct. Study 1 operationalized NWOM as an offline voice behavior rather than a revenge response as claimed in some other studies (e.g., Grégoire & Fisher, 2008). It is argued that spreading NWOM may not always be punitive in nature. Unsatisfied consumers could be spreading NWOM for various reasons and motivations, including venting anger and frustration or to warn others from suffering similar situations. However, it is also likely that consumers spread NWOM to tarnish a company’s reputation. If such is the case, then NWOM would be considered revenge-motivated behavior. The measures in Study 1 for NWOM did not specify motivation, thus, it could capture both the voice and revenge aspects. The findings of Study 1 confirmed this explanation, with desire for revenge significantly related to NWOM. It is likely that, unless specific motivations are identified, spreading negative WOM should possess both voice and revenge characteristics. This finding also indicates that the dividing lines between exit, voice, and revenge may have been blurred on the Internet.

**Power and Revenge**

The final parts of this study investigated the connection between power and revenge. This question could be answered from two perspectives: the moderating analysis in Study 1 and the experiment findings in study 2. H15 and H16 tested whether interactional empowerment and intrapersonal empowerment had any moderating effect in the anger-revenge association. The findings confirmed the moderating effect of intrapersonal empowerment only. Intrapersonal empowerment was also found to
significantly predict behavioral responses, including negative WOM and online public complaining. Interestingly, in Study 2, no mean effect was found with the intrapersonal construct. Instead, interactional empowerment was found to be related to revenge responses.

This result can be interpreted in a few ways. In the survey study, both intrapersonal empowerment and interactional empowerment were measured. The effect of interactional empowerment was found not to be significant, likely because the study participants overall sensed a high level of interactional empowerment, which could have diminished the mean difference and caused a ceiling effect. Interactional empowerment in this study context was defined as one’s intellectual understanding of the online environment and awareness of the resources and tools available on social media to produce change (Zimmerman, 1995). Given that the sample came from an Internet-savvy group from Amazon Mechanical Turk, this finding would not be surprising.

In the experiment study, the interactional empowerment construct was manipulated instead of measured. Its effect, in this case, became evident. However, the significant mean differences were found only between the low power and control conditions. According to the postulation of H16, participants in the high interactional empowerment condition should have a higher likelihood to undertake revenge responses. Yet, the experiment found their responses actually did not differ from the control (neutral) condition. This finding can be explained for the same reason mentioned above: the study participants are likely to sense a high level of interactional empowerment, with or without the study manipulation. In other words, if the study participants already had a fairly good understanding about the power the Internet and social media could grant them, reading a
neutral news reports (control condition) would not attenuate this power; however, the low power condition would do that. The findings appear to justify this explanation.

Finally, the effect of intrapersonal empowerment was found to be not evident in the experimental study. This is likely due to a weakness in the study design. The manipulation of intrapersonal empowerment was achieved by asking the participants to write about a past experience in which they had control over others/being controlled by others. Most of the responses were only in a few sentences. Thus, the manipulation might have been too weak. In addition, to avoid potential order effect of two study manipulations, half of the participants were presented with the intrapersonal empowerment manipulation prior to reading the long CNN news article and then answering the reading comprehension questions. It is likely that the priming effect of intrapersonal empowerment has been diluted, or significantly weakened. Based on these possibilities, it would be unfair and risky to conclude that intrapersonal empowerment does not affect revenge behaviors.

**Practical Implications**

There are several practical implications associated with this study’s findings. First, the study illustrated that the empowerment mechanism on social media is composed of both individual and contextual factors: while the intrapersonal aspect addresses the personality differences, the interactional aspect emphasizes on the contextual influences. An empowered individual may possess either or both of the intrapersonal and interactional components of empowerment. The most empowered users, often times acting as opinion leaders online, may be the individuals who obtained high levels of both intrapersonal and interactional empowerment. These most empowered user groups not
only have a high desire for control, perceived self-competence, and self-efficacy, they also know how to utilize new media platforms to maximize their influence over others. This study also helps us understand the user perspectives. The exit, voice, and revenge responses signal consumers’ role from passive recipient to active market participant. These behavioral responses could be associated with user typologies. For example, the lurkers, who are the most inactive users online, may be individuals with low intrapersonal and interactional empowerment, as suggested by this study’s findings. Understanding the empowerment mechanism and how it leads to various behavioral outcomes will help communication professionals (public relations as well as marketing) to better engage target audiences and stakeholders on social media.

Studying social media empowerment also yields great application for crisis management and relationship management. Past research indicated that power increases an action orientation in the power holder, even in contexts where power is not directly experienced (Galinsky et al., 2003). The application for this power-action association can be found in many online complaining behaviors. Compared with private complaining, public complaining spreads negative word-of-mouth and publicizes the issue to the mass audience. Extreme public complaining behaviors amplify the seriousness of issue and elevate the failure to a scale that deserves public outrage (Ward & Ostrom, 2006). Many online activist websites or social media pages often possess all three elements of exit, voice, and revenge. This form of response is quite destructive, can easily trigger crisis situations, and it may provide organizations little to no time to respond to or investigate crisis causes.
Online public complaining behavior is essentially a demonstration of power. It could also be labeled as the behavioral component of psychological empowerment. Given that intrapersonal empowerment and interactional empowerment are both associated with behavioral outcomes (Zimmerman, 1995), understanding the empowerment process should help public relations professionals to better perform risk assessment, environmental scanning, and crisis communication and management. Companies should take implications from the empowerment research and provide communication channels that encourage voice. They could devote more staffing and resources into managing social media conversations, such as the example given in Chapter One, where Hertz initiated a program to address consumer complaints through Twitter.

**Limitations and Future Research**

All research has some limitations. A few limitations relate to this study. First, the measure for active and passive social media use, though reflecting different levels of user engagement, is only a rough division of users’ social media activities. Active and passive use is not a comprehensive measure of social media’s influence and cannot account for all the variations in perceived empowerment, especially interactional empowerment. Future research should examine social media usage from other aspects, such as user-generated content and its influence on psychological empowerment.

Second, the effect of intrapersonal empowerment was not notable, probably because the weaknesses association with the study design and weak manipulation. In particular, participants who were assigned to the intrapersonal manipulation prior to reading the news article could have led to a weakened manipulation. Hence, future
research should focus on enhancing the intrapersonal empowerment manipulation, and test the effect independently of other interventions.

This study would also benefit from including behavioral measures of empowerment, such as asking participants’ affiliations with online support groups, virtual communities, or intentions for joining such groups. Furthermore, it might be more natural to examine social media use and empowerment in a concrete setting, such as surveying members of a brand’s Facebook fan page or Google+’s circle of acquaintances. Such virtual community settings make the relationship observed between social media engagement and empowerment more directly related.

This study verified the scale reliability and validity of the empowerment construct in the social media context. The scales verified in this study can be adopted by future research studying similar context. However, as cautioned by Zimmerman (1995, 2000), a global measure of psychological empowerment may be neither feasible nor conceptually sound because of the specific meaning of the psychological empowerment construct is context- and population-specific. Given that the social media context is subject to unique norms (e.g., Li & Li, 2014), future research should adapt the measures to different contexts with caution.

Finally, the service failure response model offers fruitful areas for future research. It would be beneficial if future studies could sample different populations that are less technology-savvy. This will generate more variations in measuring the interactional empowerment construct. The moderating effect may become evident because of so.
References


Smith, A. (1776). *The wealth of nations*. N.A.


Appendix A

Study 1 Survey Scales

Thank you for your interest in participating in this study. This purpose of the research is to test consumer reactions to service failures. You will be asked to fill out a questionnaire that will take about 10 to 15 minutes to complete. No risks or direct benefits are anticipated for your participation. Please be assured that anonymity and confidentiality will be maintained at all times. Your participation is entirely voluntary and you can refuse to participate at any times. The research is for educational purpose only, and your identity will not be recorded or associated with your responses.

By participating in the study, you are agreeing that you are 18 years or older. You are also authorizing the Primary Investigator and his staff to access your study information as may be necessary for purposes of this study.

If you have any questions concerning this study, please contact Zongchao Cathy Li at 305-284-2138, or z.li13@umiami.edu. If you have questions about your rights as a research subject you may contact Human Subjects Research Office at the University of Miami, at (305) 243-3195 or hsro@med.miami.edu.

[SECTION ON SERVICE FAILURE]

Q 1
Please recall a recent experience with a company or a service provider in which you felt, at the end of the day, dissatisfied and inadequately treated. This should be a situation in which the organization or a service provider totally failed to serve you adequately, and if you had complained, failed to redress the situation to your entire satisfaction.

Q 2
Please describe the situation briefly. ______________________________________

Q 3
When did this incident happen: _____ month(s) prior to answering this survey.

Q 4
Desire for revenge
– Please indicate to which extent you wanted:
  1. . . . to take actions to get the company in trouble.
  2. . . . to cause inconvenience to the company.
  3. . . . to punish the company in some way.
  4. . . . to make the company get what it deserves.
  5. . . . to get even with the company.

Q 5
Desire for avoidance
After the service failure, I wanted to …
1. Keep as much distance as possible between the organization and me.
2. Avoid frequenting the organization.
3. Cut off my relationship with the organization.
4. Withdraw my business from the organization.

**Q 6**

**Anger**

Through the service failures, I felt
1. … outraged
2. … resentful
3. … angry.

**Q 7**

**Dissatisfaction**

Through the service failures, I felt
1. … dissatisfied
2. … displeased.
3. … discontented.

**Q 8**

**Perceived betrayal**

1. I felt cheated.
2. I felt betrayed by the company.
3. The company broke the promise made to me.
4. The company let me down in a moment of need.

**Q 9**

** Patronage Reduction [EXIT]**

1. I spent less money with this company.
2. I stopped doing business with this company.
3. I reduced frequency of interaction with this company.
4. I brought a significant part of my business to a competitor.

**Q 10**

**Negative Word-of-Mouth [VOICE]**

1. I spread negative word-of-mouth about the company.
2. I denigrated this company to my friends.
3. When my friends were looking for a similar product or service, I told them not to buy from this company.

**Q 11**

**Vindictive Complaining to the Company [REVENGE]**

I complained to the company or its employee to …
1. Give them a hard time.
2. Be unpleasant with them.
3. Make them suffer for their services.

Q 12
After the service failure, did you post comments about the experience online?
1. Yes
2. No

Q 13
If Yes, Where did you post about the experience?

Q 14
Online Public Complaining for Negative Publicity [REVENGE]
After the service failure, I complained about my experience online …
1. To make public the behaviors and practices of the company.
2. To report my experience to other consumers.
3. To spread the word about my misadventure.

[CONTROL MEASURES]

Q 15
Failure severity
The service failure caused me… (1 to 7 scale)
1. Minor problems - major problems
2. Small inconvenience – big inconvenience
3. Minor aggravation – major aggravation

Q 16 Relation length
Before the service failure, how long have you been a customer of this company?
_____ Year _____ Months

[SECTION ON EMPOWERMENT MEASURE]

Q 17
Intrapersonal empowerment scale

Self-efficacy:
1. I can remain calm when facing difficulties because I can rely on my coping abilities.
2. No matter what comes my way, I am usually able to handle it.
3. I am confident that I could deal efficiently with unexpected events.
4. Thanks to my resourcefulness, I know how to handle unforeseen situations.
5. I consider myself to be generally more capable of handling difficult situations than others.
**Perceived competence:**
6. I am often a leader in groups.
7. I find it very hard to talk in front of a group. (R)
8. I can usually organize people to get things done.
9. Other people usually follow my ideas.

**Desire for control:**
10. I enjoy making my own decisions.
11. I prefer a job where I have a lot of control over what I do and when I do it.
12. I would rather run my own business and make my own mistakes than listen to someone else’s orders.
13. If someone opposes me, I can find ways and means to get what I want.
14. What happens to me in the future mostly depends on me.

[Quality Control] I can remain calm when facing difficulties because: please select agree.

[SECTION ON SOCIAL MEDIA USAGE MEASURE]

**Q 18**
The following questions are about your usage of social media, such as Facebook, Twitter, YouTube, etc.

How frequently do you engage in the following activities on social media sites?

- 1) Never
- 2) Few times a year
- 3) A few times a month
- 4) A few times a week
- 5) About once a day
- 6) A few times a day
- 7) Constantly/all the time

1. I watch videos or view pictures posted on social media sites.
2. I read online discussions on social media sites.
3. I read user comments/ratings/reviews on social media sites.
4. I comment on others’ posts on social media sites.
5. I contribute to conversations or discussions on social media sites.
6. I “like” posts on social media sites (clicking the like button).
7. I share contents on social media sites with my connections.
8. I post, maintain or update contents on my own social media page.
9. I post messages, videos, audios or images to my own social media page.
[DEMOGRAPHICS SECTION]

Finally, we will ask you some questions about yourself for classification purposes.

Q 19 What is your age? _____

Q 20 What is your gender?
   1. Female
   2. Male

Q 21 Which of the following best represents your racial or ethnic heritage?
   1. Asian
   2. Black/African American (non-Hispanic)
   3. Hispanic/Latino
   4. White (non-Hispanic)
   5. Other: ____________

Q 22 What is the highest level of education your have completed?
   1. Less than high school
   2. High school/ GED
   3. Some college
   4. Associates degree (2-year college Degree)
   5. Bachelor’s degree (4-year college Degree)
   6. Master’s degree
   7. Doctorate degree
   8. Professional degree (MD, JD)

Q 23 What is your annual income?
   1. $20,000 or under
   2. $20,001 to $40,000
   3. $40,001 to $60,000
   4. $60,001 to $80,000
   5. $80,001 to $100,000
   6. $100,000 and higher
   7. Prefer not to say
Appendix B

Study 2 Experiment Instrument

Thank you for your interest in participating in this study. This purpose of the research is to assess how consumers react to service failures in the digital age.

You will be asked to fill out a questionnaire that will take about 10 minutes to complete. No risks or direct benefits are anticipated for your participation. Please be assured that anonymity and confidentiality will be maintained at all times. Your participation is entirely voluntary and you can refuse to participate at any times. The research is for educational purpose only, and your identity will not be recorded or associated with your responses.

By participating in the study, you are agreeing that you are 18 years or older. You are also authorizing the Primary Investigator and his staff to access your study information as may be necessary for purposes of this study.

If you have any questions concerning this study, please contact Cathy Li at 305-284-2138, or z.li13@umiami.edu. If you have questions about your rights as a research subject you may contact Human Subjects Research Office at the University of Miami, at (305) 243-3195 or hsro@med.miami.edu.

Following is a new report from CNN.com. Please read this brief report carefully. We will then ask you a few questions related to it.

[Participants will be randomly assigned to see one of the three news stories presented in Appendix III.]

Q1. Which of the following statements represents the opinions in the news article you just read?

1) Online social networks allow one to virally affect others’ decisions with expansive reach and rapid speed.
2) Experienced social media users tend to resist social influence by discounting other people's opinions.
3) Social media is becoming a powerful tool for businesses to effectively promote their products and services.
4) None of the above.
5) All of the above.

Q2. Which of the following is true according to the article you just read?

1) The connectivity established through social media allows users to take collective actions and demand for social change.
2) Lack of moral regulations on social media has reduced users’ trust for others and estranged interpersonal relationships.
3) Online brand communities allow businesses to enhance consumer-brand relationships to build strong brand loyalty.

4) None of the above.

5) All of the above.

Q3. Manipulation check

Based on the CNN news report you read, please indicate how much you agree or disagree with the following statements.

1) One can use social media to urge organizations into greater social responsibility.

2) The connectivity on social media allows users to take collective actions to start effective movements.

3) One can have much influence on social media by connecting with others.

4) One cannot have much influence on social media because of low levels of interpersonal trust.

5) One can have a voice in wider social issues by working in an organized way with other members online.

6) The individual's influence on social media is disputable.

Q4. Next, we will ask you some questions related to your personal experience.

[Those participants assigned to the high-power condition were instructed as follows:]

Please recall a particular incident in which you had control or authority over another individual or individuals. This may be a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to lead or evaluate those individuals. Please describe this situation—what happened, how you felt, etc.

[Those participants assigned to the low-power condition were instructed as follows:]

Please recall a particular incident in which someone else had control or authority over you. This may be a situation in which someone had control over your ability to get something you wanted, or was in a position to lead or evaluate you. Please describe this situation—what happened, how you felt, etc.

[Participants in the control condition were told the following:]

Please recall your day yesterday. Please describe your experiences yesterday—what happened, how you felt, etc.
Q5.
Following is a hypothetical scenario. Please take a few minutes to imagine yourself being in the following situation. Then please tell us how you were likely to feel or react.

You invited some close friends to attend your birthday dinner at a popular local restaurant. You made a dinner reservation on the restaurant’s website for a table of ten at 7 p.m. Everyone showed up on time and the restaurant was packed.

However, the receptionist told you that they did not receive your reservation, and they could not set aside a large table for you. You said you made the reservation online a week ago and the website confirmed your reservation.

Without showing any compassion or intent to resolve the issue, the receptionist very coldly brushed you off saying unfortunately they couldn't accommodate your request at this time, and you and your friends had to wait for approximately an hour to be seated. You asked to talk to the manager and you were told the manager was too busy to talk with you. You and your friends were simply told to wait, standing by the front entrance, for an hour to be seated.

(CONTROL MEASURES)

Q 6.
After the incident, would you post about your experience online or via social media (e.g., Twitter, Facebook or Yelp)?

1) Yes
2) No

Q 7.
I would complain about my experience online:
1) To spread negative word-of-mouth about the restaurant.
2) To warn others from suffering similar situations from the restaurant.
3) To persuade potential customers not to come to the restaurant.
4) To publicize the poor behavior of the receptionist.
5) To vent my anger and frustration.

Q 8
If you would complain online, what would you say about the experience? Please write below the content of your post.
Finally, we will ask you some questions about yourself for classification purposes.

Q 9  What is your age? _____

Q 10  What is your gender?
    3.  Female
    4.  Male

Q 11  Which of the following best represents your racial or ethnic heritage?
    6.  Asian
    7.  Black/African American (non-Hispanic)
    8.  Hispanic/Latino
    9.  White (non-Hispanic)
    10. Other: ____________

Q 12  What is the highest level of education you have completed?
    9.  Less than high school
    10. High school/ GED
    11. Some college
    12. Associates degree (2-year college Degree)
    13. Bachelor’s degree (4-year college Degree)
    14. Master’s degree
    15. Doctorate degree
    16. Professional degree (MD, JD)

Q 13  What is your annual income?
    8.  $20,000 or under
    9.  $20,001 to $40,000
    10. $40,001 to $60,000
    11. $60,001 to $80,000
    12. $80,001 to $100,000
    13. $100,000 and higher
    14. Prefer not to say

Q 14  To your best guess, what is the purpose of this study?
Appendix C

Interactional Empowerment Manipulation Stimuli

Condition 1: High Power Condition

(CNN) — The power of social media has moved from the companies to consumers, with possibly revolutionary results, according to a recent study published in the new issue of Harvard Business Review.

Research that looked at the changing impact of social media on consumer business interactions was conducted by two professors of marketing at Harvard Business School, Dr. Michael I. Norton and Dr. John T. Gourville.

Their study revealed that, with the growth of social media, consumers have been provided a force multiplier that has tilted the balance of power in their favor. In the digital age, ordinary consumers are visible, organized and able to vitally affect others’ decisions with expansive reach and rapid speed.

Social media technologies have accelerated the effectiveness of consumer activism. According to the study, the connectivity established through social media can enhance users’ abilities to take collective actions and demand for social change.

Without the constraints of time and location, anyone who has motivation and Internet access has the potential to spread a message to millions.

As a result, “empowered social media users tend to demonstrate social influence by either embracing the opinions of others or deliberately expressing opinions that converge with those of others,” Norton and Gourville wrote.

Meantime, the leverage and influence social media give citizens are rapidly spreading into the business world. Socially conscious consumers are seeking to use their voices and purchasing power to halt unsustainable business practices, Norton and Gourville stated.

Concerned consumers are realizing that they can use social media to organize themselves around shared values to start effective movements. Social media give them a sounding board to share ideas, as well as a means to punish irresponsible corporate behaviors, the study stated.

One example cited in the study was the Facebook protests led by Greenpeace against Nestlé’s tactic support for deforestation in Malaysia and, since then, more Facebook protest pages have followed.

Norton commented that “in the coming years, if not sooner, social media will become a powerful tool that consumers will aggressively use to influence business attitudes and force companies into greater social responsibility.”

Simon Mainwaring, a New York Times best-selling author and founder of We First, commented that Americans will invariably see many more instances of consumer-initiated protests, using social media to urge others to abandon companies that refuse to act in responsible ways.

Simply put, consumers have taken control of the interaction with businesses online — and they are using it to exercise personal power as never before, the authors of the Harvard study stated.
Condition 2: Low Power Condition

CNN—The power of social media has moved from the companies to consumers, but with possibly controversial results, according to a recent study published in the new issue of *Harvard Business Review*.

Research that looked at the changing impact of social media on consumer business interactions was conducted by two professors of marketing at *Harvard Business School*, Dr. Michael I. Norton and Dr. John T. Gourville.

Their study revealed that, with the growth of social media, consumers have been confined to an online social structure that has tilted the balance of influence against their favor. In the digital age, ordinary consumers are isolated, deregulated and unable to effectively impact others’ decisions with weak social ties and mediated communication channels.

Social media systems may have reduced the credibility of interpersonal trust. According to the study, the virtually established through the Internet can diminish users’ trust for others online and estrange interpersonal relationships.

Without the constraints of social and moral regulations, any person who has intent and Internet access has the potential to spread a rumor to millions.

As a result, “experienced social media users tend to resist social influence by either discounting the opinions of others or deliberately expressing opinions that diverge from those of others,” Norton and Gourville wrote.

Meantime, the popularity and influence social media grant citizens are rapidly spreading into the offline world. Socially conservative groups are seeking to use their high levels of motivation and lobbying skills to criticize disagreeable social issues, Norton and Gourville stated.

Concerned social groups are realizing that they can use social media to challenge controversial views and shape public discussions. Social media give them a sounding board to debate ideas, as well as a means to push for a shift in our social value system, the study stated.

One example cited in the study was the Chick-fil-A crisis ignited by Dan Cathy, its president and chief operating officer, who made comments against gay marriage and, since then, more activist groups have followed.

Norton commented that “in the coming years, if not sooner, social media will become a significant tool that consumers will aggressively use to influence business attitudes and force our society into an intolerable single value system.”

Simon Mainwaring, a New York Times best-selling author and founder of *We First*, commented that Americans will invariably see many more instances of activists-initiated protests, using social media to inflame social issues and polarize public opinions.

Simply put, consumers may have been too expressive and socially active online—and they are misusing the system to harm social relations as never before, the authors of the *Harvard* study stated.
Condition 3: Control Condition

Social media: A new era of economic growth

By Kelly Wallace, for CNN

Updated 12:32 PM ET, Tue February 10, 2015

(CNN) — The influence of social media has moved from the companies to consumers potentially spurring economic growth, according to a recent study published in the new issue of Harvard Business Review.

Research that looked at the changing impact of social media on small business operations was conducted by two professors of marketing at Harvard Business School, Dr. Michael I. Norton and Dr. John T. Gourville.

Their study revealed that, with the growth of social media, companies have been provided a force multiplier that has tilted the use of technology in their favor. In the digital age, small businesses are present, visible and able to effectively promote their products and services with online platforms and mobile apps.

Social media technologies have accelerated the effectiveness of two-way communication. According to the study, the interactivity established through social media can enhance companies' abilities to reach out to consumers and ask for feedback.

Without the constraints of cost and access, any company that has motivation and Internet access has the potential to spread a message to millions.

As a result, "well-represented companies tend to have better performance by either publicizing their products or services or drawing more interactions with consumers when embracing new technologies," Norton and Gourville wrote.

Meanwhile, the leverage and influence social media give businesses are rapidly spreading into the local community. Local businesses are seeking to use the online tools and social networks to build a virtual community online, Norton and Gourville stated.

Many companies are realizing that they can use social media to market themselves towards business goals by initiating online campaigns. Social media give them a sounding board to share ideas, as well as a means to connect with target consumers, the study stated.

One example cited in the study was the Ice Bucket Challenge campaign led by ALS Association to promote awareness of the disease amyotrophic lateral sclerosis and, since then, similar grass root campaigns have followed.

Norton commented that "in the coming years, if not sooner, social media will become a powerful tool that businesses will increasingly use to promote products, services and communicate with consumers for better relationships."

Simon Mainwaring, a New York Times best-selling author and founder of We First, commented that Americans will invariably see many more instances of business-initiated efforts, using social media to build brand loyalty that will benefit the company in many different ways.

Simply put, small businesses have taken advantage of various features of social media — and they are using it to build success as never before, the authors of the Harvard study stated.